

A revisionary classification of the Cynipoidea (Hymenoptera) of the Ethiopian Zoogeographical Region

Aspicerinae (Figitidae) and Oberthuerellinae (Liopteridae)

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Synopsis

This is the first of a series of papers which will cover the taxonomy of the cynipoid fauna of the Ethiopian Region. Keys to the world families and subfamilies are provided. In addition, keys to the genera and species of the Ethiopian Aspicerinae and Oberthuerellinae are given and are based on a study of type-specimens and all other available material. Twelve new species are described, and five new combinations and two new specific synonymies are established.

Introduction

This is the first attempt to review the Ethiopian Cynipoidea as a whole. Except where specific exceptions are mentioned the term Ethiopian Region refers to the original concepts of Sclater

(1858) and Wallace (1876). The most recent work covering the Cynipoidea at the family, subfamily and generic level is that of Weld (1952); this work dealt with the fauna of all geographical regions and superseded that of Dalla Torre & Kieffer (1910), which was the first comprehensive treatise on the Cynipoidea. More recently Benoit (1952–56) described various genera and species from Africa but did not include generic keys. All known species of which type-material is available have been fully redescribed. Where the type-material is lost its presumed taxonomic position is indicated in the text. In very few instances are host data given, and these are based solely on labels attached to the specimens.

Material examined, terminology and acknowledgements

I have been fortunate in being able to borrow large amounts of material from Dr J. Decelle, Musée Royal de l'Afrique Centrale, Tervuren; Madame S. Kelner-Pillault, Muséum National d'Histoire Naturelle, Paris; Dr E. Königsmann, Museum für Naturkunde der Humboldt-Universität, Berlin. All have been kind enough also to loan type-material from their respective collections. This material, together with R. E. Turner's cynipoid collections in the British Museum (Natural History) and more recent material obtained from Malaise traps, has formed the basis for this revision. There are, however, large areas in the Ethiopian Region from which no material has been available for examination. The terminology used is as in Richards (1977), but some older names are used particularly in reference to wing venation. Some of the more general taxonomic terms used in this paper are illustrated by labelled figures (Figs 1–21). It is hoped that this will provide a correlation between the terms used by Richards (1977) and by Ross (1936). Type depositories are given in abbreviated form in the text and are listed below in alphabetical order of the towns in which they are situated.

MNHU, Berlin	Museum für Naturkunde der Humboldt-Universität, Berlin
IP, Eberswalde	Institut für Pflanzenschutzforschung, Eberswalde, Germany
AM, Grahamstown	Albany Museum, Grahamstown, South Africa
KSM, Kansas	Snow Entomological Museum, University of Kansas, Lawrence, Kansas
BMNH	British Museum (Natural History), London
MNHN, Paris	Muséum National d'Histoire Naturelle, Paris
MRAC, Tervuren	Musée Royale de l'Afrique Centrale, Tervuren, Belgium

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Family classification of Cynipoidea

In preparing the key to families account has been taken of subfamilies proposed since Weld (1952). Five families and thirteen subfamilies are recognised in this paper. Yoshimoto (1970) proposed the name *Himalocynipinae* to include the genus *Himalocynips*. According to Yoshimoto this new subfamily is distinguished from *Figitinae* on the number of antennal segments, a partial nervulus and post nervulus in the forewing, and a projecting clypeus. I have not seen the unique specimen on which the subfamily is based but have included it in the key to subfamilies on the basis of the description. Similarly, to accommodate the genus *Austrocynips* Riek (1971) erected the subfamily *Austrocynipinae* which, because it has a strongly produced hypopygium, he associated with the subfamily *Cynipinae*. The wing venation, however, appears to be closer to that of the *Pycnostigmatinae*, which have a radial cell resembling at first sight a pterostigma.

In the family and subfamily keys the *Eucoilidae* have been treated as a family and not as a subfamily of the *Figitidae* as in Weld (1952) and earlier authors. The reason for this is stated by Eady & Quinlan (1963), namely that the differences between *Eucoilidae* and subfamilies *Anacharitinae*, *Figitinae* and *Aspicerinae* are much greater than the differences between these three subfamilies of *Figitidae*.

The Ibalidae are distinguished from all other families by the elongate radial cell (Fig. 9), distinct areolet, smooth and inconspicuous petiole and elongate metatarsus (Fig. 10). As far as is known all species are parasites of Siricidae (Symphyta). They are probably the largest cynipoids, being between 10 and 25 mm in length. Their distribution is Holarctic and Australasian.

The Liopteridae are distinguished from the Ibalidae by the short radial cell and from other families by the relative lengths of the gastral segments. The Liopteridae are large, 5–14 mm in length. The family consists of three subfamilies, mainly tropical in distribution, of which two (Oberthuerellinae and Mesocynipinae) are known to occur in the Ethiopian Region. The life history is not known.

The Eucoilidae are parasites of Diptera, and are clearly distinguished from other Cynipoidea by their distinctive scutellum, which comprises an outer disc surmounted by a cup-shaped elevation in the centre (Fig. 14). The pronotum is very often distinctly produced medially into an anterior plate with a strong posterior margin (pronotal plate). In the forewing the cubitalis ($Rs+M$) is usually visible and emerges from a point very close to the lower end of the basalis (close to the junction of $M+Cu$) or combined with the median (Cu_1) for a short distance (Fig. 15). The life histories of some of the more common species are known; they are of economic importance in that they parasitise Diptera attacking cereal crops. Eucoilidae have a wide range of dipterous hosts including the stem-boring and leaf-mining larvae of the family Agromyzidae, the plant-feeding families Chloropidae and Anthomyiidae and those larvae of the family Sphaeroceridae and other flies associated with animal excreta. Adult Eucoilidae vary in size from 1.5 to 5.0 mm and are world-wide in distribution.

The Figitidae include four subfamilies, each resembling the others in the majority of characters. The Aspicerinae are generally the largest, 4.5–5.0 mm in length, and are parasites of the larger Diptera such as Syrphidae. The gaster has a very distinctive second tergite which is shaped rather like a saddle and termed liguliform (Fig. 5). The Anacharitinae have wedge-shaped heads and generally the second tergite of the gaster is longer than the third (Fig. 8). The forewing has at the most a vestigial cubitus (vein M) and a distinctive radial cell (Fig. 21). The adults vary in size from 3 to 4 mm depending on the length of the petiole. Some genera have a short petiole and can be confused with the subfamily Figitinae. The Anacharitinae are parasites of lace-wings (Neuroptera). The Figitinae are very similar to the Anacharitinae and Aspicerinae, but in the majority of genera the second tergite is shorter than the third or equal to it and generally the cubitus (vein M) is distinct, thus separating it from the Anacharitinae. They are parasites of smaller Diptera and range in size from 2 to 4 mm. They are world-wide in distribution. However, all three subfamilies have genera that can be confused with those of other subfamilies, e.g. in Figitinae the genera *Neralsia* Cameron and *Xylophora* Kieffer have a very reduced second gastral tergite which can be mistaken for that of an Aspicerinae, and in some cases the cubitus is vestigial as in the Anacharitinae.

The subfamily Himalocynipinae is similar to the Figitinae (Yoshimoto, 1970) but differs in having 20-segmented antennae, the head unusually small in relation to the thorax, the second tergite of the gaster considerably longer than the third, a partial nervulus and postnervulus present in the forewing, and a small subcordate clypeus strongly projecting forward and upward. Size 5.5 mm.

The family Cynipidae is represented by three subfamilies, each having distinctive characters, but some genera are nevertheless difficult to place in a subfamily. Cynipidae are separated from related families on the forewing venation and the relative lengths of the gastral segments. In the forewing the cubitalis ($Rs+M$), when visible, arises from a point midway along the basalis ($Rs+M$) (Fig. 17) and in the female the largest free tergite is either the second or the second and third fused (Figs 18–19). The Pycnostigmatinae contains two genera; as far as is known both are restricted to Africa. The forewing is very distinctive in having a reduced radial cell which, unless closely examined, can be mistaken for a pterostigma, the wing veins are very thick (Fig. 23), and the number of antennal segments is 12, 15 or 19. When viewed laterally, the gaster has what appears to be one large segment occupying almost the whole of the visible surface area; this consists of segments two and three fused together, the remaining segments generally being obscured. The first segment of the gaster in one genus is longitudinally ridged as in the cynipine

genus *Synergus* Hartig. This appearance of the gaster has been taken by some authors as suggesting the habitus of an inquiline. At present its life history is unknown. Size 2.5–4.0 mm.

The Cynipinae are usually sculptured and the middle and hind tibiae each have two distal spurs. They are either gall-causers or inquilines in galls of other Cynipinae. The gall-causers attack a range of plants: Compositae, Labiatae, Papaveraceae, etc. (herbaceous plants); Rosaceae; Fagaceae (*Quercus*). The only gall-causer at present known from the Ethiopian Region is *Rhoophilus* Mayr on *Rhus* (Anacardiaceae). In the extreme northern parts of Africa where there are oaks various European genera (*Andricus*, *Neuroterus*, etc.) are found. Some species of Cynipinae on oak exhibit the phenomenon of alternation of generations. One generation consisting of both males and females and the other entirely of agamic females reproducing parthenogenetically. One genus, *Ceroptres*, has been bred commonly from galls on oak; Blair (1949), however, stated that *C. arator* Hartig was parasitic on *Andricus kollari* (Hartig). Riek (1971) refers to *Ceroptres* as being an inquiline in dipterous galls. The size varies from 2 to 7 mm.

The Alloxystinae are very small in relation to other Cynipoidea, the larger specimens being only about 2 mm long, and are separated from other Cynipidae by the characteristic shiny appearance although sculpture is revealed by the scanning electron microscope, see Andrews (1978). The whole insect lacks the rugose type of sculpture found on the mesonotum of Cynipinae, and the scutellum only rarely has distinct foveae; occasionally notaulices are present and in others a mesopleural suture is present. They are hyper-parasites of aphids through the braconid subfamily Aphidiinae. Distribution is world-wide.

Taxonomic characters of Cynipoidea

Antennae

The antennae of the ♀ are generally 13-segmented and vary in length and shape but are constant within a species. Some species have filiform antenna and others are club-shaped. The ♂ antennae are usually 14-segmented and filiform. However, in certain genera the number of segments can vary by the occasional extra segments and in one or two subfamilies by up to a maximum of 7 extra segments in the ♀. The antenna consists of a scape, pedicel and flagellum (Fig. 28). In describing the females of some species the term club is used and in this paper, in order that a club segment is not confused with other segments, I have counted as club segments those with rhinaria. The relative lengths of antennal segments are given as ratios, e.g. Segment Numbers (SN) 1, 2, 3, 4 = Antennal Ratio (AR) 5 : 3 : 18 : 12, to further explain the overall shape of the antennae. In some males some of the basal segments of the flagellum are modified, i.e. swollen or excised (Figs 38–40).

Head

Characters most useful are the distance between the compound eyes (inner orbits) compared with the height of an eye measured medially. The variation in the shape of the vertex viewed posteriorly and in some subfamilies the shape of the occipital carina and sculpture in the occipital area are important. Some species have heads broader than the thorax. In general, however, head characters have not been used at the family and subfamily level but within genera and species a wide variety of different parts have been used. In some groups the form of mandible varies and probably relates to the biology of particular groups and their various methods of emerging when adult, be their habitat as larvae a gall or an insect. The sculpture of the face, the presence or absence of striae and of pubescence are usually important at the specific level.

Thorax

The thorax has many important characters (Fig. 29). As in Apocrita generally the first abdominal segment has become fused with the thorax and is connected to the abdomen by a narrow petiole. This post-propodeal part of the abdomen is termed the gaster (Figs 1–8). In some families the pronotum has a distinctive medial protrusion (pronotal plate) which varies in shape and this is a useful character at the generic and species level (Figs 13, 22, 30). This is best seen in anterodorsal view. In certain species the pronotal plate is either absent or represented by small pits or foveae.

The mesoscutum can have notaulices (parapsidal grooves) which vary in length, width and surface sculpture. Anterior parallel lines, lateral lines and a median scutal line are present in some species, absent in others. The mesopleuron sometimes has a mesopleural suture (precoxal suture or carina of Richards, 1977; median episternal groove of Snodgrass, 1910). This suture, when present, can be very distinct or lost in a mass of striations or reticulate-rugose sculpture. Its form within a species is fairly constant and therefore a useful character either at the species level or at the generic level in some families. An area present in some genera in the upper anterior part of the mesopleurae and more recently termed mesopleural triangle (Andrews, 1978) is useful at the generic level. In the majority of genera the scutellum has either one or two pits or foveae at the base bordering the suture separating the mesoscutum from the scutellum, although in some genera, e.g. *Neuroterus*, the mesoscutum is fused to the scutellum without a suture. In Eucoilidae some genera have a distinctive lateral bar on either side of the foveae. The scutellum is usually separated from the mesoscutum by a suture and varies enormously between families, being smooth and shiny in the Alloxystinae, coarsely sculptured in the Figitinae and Aspicerinae or with a distinctive disc or cup in the Eucoilidae. The term cup used by Weld (1952) is employed here to differentiate that centre part of the scutellum from the outer part termed the disc. The disc itself has dorsal and lateral faces in some families (Fig. 29). In some genera of Aspicerinae, Figitinae and Eucoilidae the apex of the scutellum is produced to form a very distinct spine. The propodeum generally has parallel or bowed carinae which are sometimes obscured by pubescence.

Gaster

The gaster is extremely variable in the relative lengths of the segments and in their shape viewed laterally and dorsally. In a number of instances there has been fusing together of segments. The first segment of the gaster is petiolate, either long or short, smooth or sulcate and sometimes hidden by a ring of pubescence at the base of tergite 2 in the Eucoilidae. The surface of tergite 2 at the base is sometimes striated and other segments can be punctate. The hypopygium is very clearly produced in the Cynipinae, the ventral spine varying in length.

Legs

The legs vary in size and the shape of the various parts, and can be densely pubescent on the coxae in some species. In some genera the hind tibiae are longitudinally rigid or furrowed, in others the hind femur has a tooth. The mid and hind tibial spurs can vary in length. In the Cynipidae the hind tarsal claws provide useful generic and specific characters. In the Ibaliiidae the metatarsus is exceptionally long, being twice as long as tarsal segments 2-5 combined.

Wings

Cynipoidea generally are fully winged although some families have brachypterous or apterous forms. The venation of the forewing, though somewhat reduced, generally retains two branches of vein *Rs* (Fig. 15). The presence of vein *Rs+M* and the point of juncture with *Rs+M* and its closeness to *Cu*₁ are important at the subfamily level in those groups where it is present. The radial cell varies significantly in shape within families and from species to species, being either open or closed on the wing margin. The presence or absence of the areolet and cubitus is important in all groups. Generally the wing surface has fine scattered pubescence, although in some species this character is completely absent or reduced to a dotted surface and is invariably ciliate on the wing margins. In some species the apex of the forewing can be arcuate, incised or truncate though generally it is rounded.

Sculpture

Cynipoidea exhibit extremes of sculpture, both in form and intensity, on various parts of the insect. Only the Alloxystinae appear completely devoid of sculpture (visible under scanning electron microscope). In other subfamilies, e.g. Liopteridae, the mesonotum has a coarse transversely sculptured surface. In the Figitidae the sculpture of the mesonotum varies in form from dull and sculptured to smooth and shining. The Cynipinae gall-causing genera with alternate generations exhibit extreme diversity. In the agamic forms the face, mesoscutum, scutellum and

mesopleurae have different types of sculpture and some are pubescent. In the sexual forms the various parts can be alutaceous or finely coriaceous. The terminology for sculpture follows Eady (1968).

Colour

Most Cynipoidea are sombre in colour. They are more generally a mixture of black, red or yellow but never metallic as in some other Hymenoptera. In the larger species the thorax tends to be blackish with a distinctive reddish brown gaster, e.g., Liopteridae, Ibalidae. In the smaller species a mixture of red, black and yellow is normal, and exceptionally in the agamic forms of some Cynipidae, a dull darkish yellow. Some species are predominantly blackish, in other species reddish blackish yellowish colour patterns are exhibited. The use of colour in identification has to be treated cautiously because, as with other Hymenoptera, factors such as humidity, temperature, host or plant habitat of the larval stages can have a strong influence on the colour of the adult insect.

Key to families and subfamilies of world Cynipoidea

- 1 Largest segment of the gaster the fourth, fifth or sixth viewed laterally (Figs 1–4) with two to four small segments preceding largest segment 2
 - Largest segment of the gaster the second or third (Figs 5–8), or formed by these two segments fused together (Fig. 7), with at most only one small segment preceding the largest 5
- 2 Radial cell of forewing at least nine times as long as broad, closed on front margin (Fig. 9). Segment 2 of gaster longer than 3 viewed laterally along the dorsal curvature, segment 1 smooth and indistinct, segment 6 the largest. Segment 1 of tarsus (metatarsus) of hind leg as long as segments 2–5 combined (Fig. 10) **IBALIIDAE**
 - Radial cell of forewing less than nine times as long as broad. Segment 1 of hind tarsus not as long as 2–5 combined. Petiole distinct and sulcate (except the genera *Kiefferiella* and *Heteribalia*) (**LIOPTERIDAE**) 3
- 3 Hind femur with a distinct tooth on underside (Fig. 11) between middle and apex. Mid and hind coxae almost round and strongly swollen. Scutellum with a distinct spine at apex (Fig. 12) (exceptionally without). Segment 1 of gaster generally at least as long as wide, sulcate, segment 5 the largest with three short segments preceding it (except in *Xenocynips* which has 2–4 fused) (Fig. 32) **OBERTHUERELLINAE** (p. 109)
 - Hind femur without a tooth on the underside, mid and hind coxae elongated. Scutellum without a spine. Segment 1 of gaster sometimes shorter than wide 4
- 4 Segment 1 of gaster at least twice as long as wide and attached tangentially (Fig. 3); segment 4 of gaster the largest **LIOPTERINAE**
 - Segment 1 of gaster in the form of a ring or collar, never longer than wide and attached normally (Fig. 4); segment 5 or 6 of gaster in ♀ (except in *Paraegilips*, a genus based on a ♂ from the Philippines) the largest **MESOCYNIPINAE**
- 5 Scutellum with a disc or cup on dorsal surface (Fig. 14). Pronotum often very pronounced, produced frontodorsally into an anterior plate with a strong posterior margin (pronotal plate) (Fig. 13). Forewing with cubitalis ($Rs+M$) usually visible and arising from a point very close to lower end of the basalis (near junction with $M+Cu$) (Fig. 15), areolet not indicated, or combined with median (Cu_1) for a short distance. Segments 2 and 3 of gaster fused, without visible suture. (Brachypterous forms sometimes occur.) **EUCOILIDAE**
 - Scutellum without a disc or cup dorsally, sometimes with a posterior fovea or apical spine (Fig. 33) (Aspicerinae). Pronotum if raised dorsally into an anterior plate then without a posterior margin, very often indistinct or absent 6
- 6 Alate; forewing with cubitalis ($Rs+M$), when visible, arising from a point at or close to junction of basalis (Rs or R_s and M) with median (Cu_1) (Fig. 16), areolet indicated. Female often with either second or third tergite of gaster the largest (Fig. 6). Male generally with cylindrical gaster (except Aspicerinae). Mesopleuron sculptured medially at least, or scutellum with apical spine (**FIGITIDAE**) 7
 - Winged, brachypterous or apterous. Forewing with cubitalis ($Rs+M$), when visible, arising from a point nearer the middle of basalis (Rs and M) than to the junction of basalis with median (Cu_1) (Fig. 17). Female with the largest free tergite either the second (Fig. 19) or the second and third fused together, with or without an obsolete suture visible (Fig. 18). Both sexes

- with gaster laterally compressed; sometimes whole insect smooth and shining. Scutellum never with an apical spine (**CYNIPIDAE**) 10
- 7 Tergite 2 of gaster liguliform (Fig. 5). Hind tibiae in most genera longitudinally ridged or furrowed on outer margins or posteriorly (Fig. 34). Scutellum with one or more longitudinal carinae and subapically with either a spine or foveae. Thorax sculptured **ASPICERINAE** (p. 93)
- Tergite 2 of gaster not liguliform (Fig. 6). Hind tibiae not longitudinally ridged or furrowed externally or posteriorly, at most with longitudinal carinae or groove internally. Scutellum usually without three longitudinal carinae or subapical foveae, though more frequently produced apically to form a spine. Thorax generally smooth and shining, occasionally dull and sculptured 8
- 8 Tergite 2 of gaster shorter than third (Fig. 6); segment 1 never as long as wide. Forewing with cubitalis (*Rs+M*) dividing externally before point of emission of *2rm* (i.e. areolet present, though often obsolete) (Fig. 16) **FIGITINAE**
- Tergite 2 of gaster longer than third (Fig. 8), segment 1 at least as long as wide, generally more than twice as long as wide (Fig. 8). Forewing with cubitalis (*Rs+M*) dividing externally at point of emission of vein *2rm* (i.e. areolet vestigial) (Figs 20, 21) 9
- 9 Head distinctly broader than thorax viewed dorsally. Gaster wedge-shaped (except in *Acanthae-gilips*). Antenna of ♀ 13-segmented, ♂ 14-segmented. Radial cell of forewing open or closed, cubitus vestigial, nervellus and post nervellus absent. Segment 1 of gaster at least as long as broad, generally much longer and petiolate; tergite 2 of gaster longer than third (Fig. 8) **ANACHARITINAE**
- Head small, narrower than thorax, oblong in dorsal view. Antenna of ♀ 20-segmented (♂ unknown). Radial cell of forewing open on front margin (*R*₁ and *Rs*₂ not reaching margin of wing), cubitus (*M*) almost reaching apex of forewing, areolet absent, nervellus (*Cu* and *Cu-a*) and post nervellus (*M-cu*) indicated. Clypeus projecting forward and upward away from the unsclerotized area and truncate labium. Segment 1 of gaster shorter than wide, tergite 2 at least half as long as remaining visible segments viewed laterally . . . **HIMALOCYNIPINAE**
- 10 Radial cell of forewing with a distinct pterostigma (Fig. 20).
Antennae of ♀ 15-segmented, ♂ unknown **AUSTROCYNIPINAE**
- Forewing without a true pterostigma 11
- 11 Radial cell much reduced, closed, its veins thick and heavy (Fig. 23).
Gaster with segments 2 and 3 completely fused (as in *Synergus*, cf. Fig. 18). Antennae of ♀ 12-, 15- or 19-segmented. **PYCNOSTIGMATINAE**
- Radial cell normal (at most very little reduced), open or closed (Figs 17, 35) (apterous forms occur) 12
- 12 Mid-tibia often with only one spur, hind tibia with one spur or more often with two very unequal spurs. Vertex, mesoscutum, scutellum, mesopleuron and gaster smooth and shiny. Pronotum generally sharply angled anteriorly (Fig. 24), this forming a lateral vertical carina (Fig. 25).
Gaster with a pubescent ring at base of tergite 2. Male antenna with either the fourth, rarely the third, sometimes the third to fifth segment modified (Figs 39, 40) . . . **ALLOXYSTINAE**
- Mid and hind tibiae each with two distinct spurs. Sculpture present at least on the vertex, mesoscutum, scutellum, mesopleuron or gaster. Pronotum generally not angled sharply anteriorly (Figs 26, 27), but if some carinae indicated (Figs 36, 37) then head and thorax strongly sculptured. Gaster very rarely with pubescence at base of tergite 2 of gaster. Antenna of male with modified segment, when present, always the third (Fig. 38) . . . **CYNIPINAE**

Checklist of the families and subfamilies of Cynipoidea

- IBALIIDAE** Thomson, 1862
LIOPTERIDAE Ashmead, 1895
OBERTHUERELLINAE Kieffer, 1903
LIOPTERINAE Ashmead, 1895
MESOCYNIPINAE Hedicke & Kerrich, 1940
EUCOILIDAE Thomson, 1862
FIGITIDAE Thomson, 1862
ASPICERINAE Kieffer, 1910
FIGITINAE Thomson, 1862

- ANACHARITINAE Thomson, 1862
 HIMALOCYNIPINAE Yoshimoto, 1970
 CYNIPIDAE Hartig, 1840
 AUSTROCYNIPINAE Riek, 1971
 PYCNOSTIGMATINAE Cameron, 1905
 ALLOXYSTINAE Hellén, 1931
 CYNIPINAE Hartig, 1840

Checklist of the Ethiopian species of Aspicerinae and Oberthuerellinae

- FIGITIDAE Thomson, 1862
 ASPICERINAE Kieffer, 1910
ANACHAROIDES Cameron, 1904
arcus sp. n.
astrida sp. n.
decellius sp. n.
elongaticornis Benoit, 1956
eurytergis Benoit, 1956
nigra sp. n.
pallida sp. n.
paragi Benoit, 1956
quadrus sp. n.
rufa (Kieffer, 1910)
sanitus sp. n.
striaticeps Cameron, 1904
spinosipes (Kieffer, 1910)
gibbosus Benoit, 1956 syn. n.
stygius Benoit, 1956
suspensus sp. n.
PROSASPICERA Kieffer, 1907
africana (Kinsey, 1919) comb. n.
antennata (Benoit, 1956) comb. n.
kisantua (Benoit, 1956) comb. n.
optivus sp. n.
paragicida (Benoit, 1956) comb. n.
tropica (Kieffer, 1910) comb. n.
 LIOPTERIDAE Ashmead, 1895
 OBERTHUERELLINAE Kieffer, 1903
OBERTHUERELLA Saussure, 1890
abscinda sp. n.
aureopilosa Benoit, 1955
breviscutellaris Benoit, 1955
crassicornis Benoit, 1955
compressa Benoit, 1955 syn. n.
lenticularis Saussure, 1890
longicaudata Benoit, 1955
longispinosa Benoit, 1955
nigra Kieffer, 1910
nigrescens Benoit, 1955
tibialis Kieffer, 1904
triformis sp. n.
TESSMANNELLA Hedicke, 1912
expansa sp. n.
nigra Hedicke, 1912
spinosa Hedicke, 1912
transiens Benoit, 1955
XENOCYNIPS Kieffer, 1910
subsquamata Kieffer, 1910

ASPICERINAE Kieffer

Aspicerinae Kieffer, 1910 : 50. Type-genus: *Aspicera* Dahlbom.

Tergite 2 of gaster less than half the total length of gaster and distinctly liguliform (Fig. 5). Hind tibia in most genera with a longitudinal ridge. Scutellum with one or more longitudinal carinae and subapically with a tooth or spine. Forewing with radial cell completely open on front margin (Fig. 45), invariably open at base; wing surface generally bare, margins either bare or with short hair fringe.

DISCUSSION. Eight genera are at present recognised as being in the subfamily Aspicerinae. Only two of these, *Prosaspicera* Kieffer and *Anacharoides* Cameron, are known to occur in the Ethiopian Region. Previously four species of *Aspicera* Dahlbom were recognised; these are now transferred to *Prosaspicera*. Two other species of *Aspicera* have been described from North Africa and do not occur in the region covered by this paper. They are *A. aegyptica* Hedicke from Egypt and *A. lobata* Hedicke from Tunisia. The holotypes of these two species were lost due to bombing in the 1939–45 war. *Aspicera* has been included in the key to genera in order that it may be recognised if it is found to extend into the Ethiopian Region. Of the genera now recognised from the region, *Prosaspicera* contains, together with the one new species described here, six species. Of these, five are based on females, and one on a male; in only two species are males and females correlated. The genus *Anacharoides* now contains 13 recognised species of which seven are known from both males and females; six of these species are new and described here for the first time. Two Kieffer species, *spinosispes* and *rufa*, both originally described in the genus *Coelonychia*, are lost and could not be found by Dr Königsmann. In correspondence he indicated that they might be in another collection of which loan records have been lost. *C. spinosispes* was made a junior synonym of *Anacharoides striaticeps* Cameron by Weld (1930).

The Aspicerinae have many close affinities with the Figitinae but are generally distinguished from them on the shape of tergite 2 of the gaster, which is liguliform or saddle-shaped (Fig. 5), and the longitudinally ridged or furrowed hind tibiae. The thorax is invariably sculptured and the scutellum has one or more longitudinal carinae and subapically a spine or foveae.

Key to genera of Ethiopian Aspicerinae

- 1 Scutellum with a sharply pointed apex in the form of a spine, not rounded, truncate or emarginate; scutellar foveae not extending to middle of scutellum (Fig. 33). Scutellar spine with longitudinal striations; mesonotum sculptured, rarely shining. Segment 1 of gaster wider than long and crenulate. Radial cell of forewing open at base, generally with R_1 indicated (Figs 41, 42). Hind tibiae with hairs but without erect spines (Fig. 43) 2
- Scutellum not ending in a spine, truncated at apex (Fig. 44); scutellar foveae extending at least half the length of scutellum, separated by a septum, the apex of each fovea enclosing a triangular area; apex of scutellum with a margined semicircular depression (Fig. 44). Segment 1 of gaster at least twice as long as broad. Radial cell of forewing completely open at base (Fig. 45). Hind tibiae with perpendicular spines on outer margin (Fig. 46)
 - 2 Mesoscutum dull and conspicuously reticulate-coriaceous with medial scutal line in form of a raised ridge starting at base, dividing at a point two-thirds down from the apical margin of the pronotum and forming a depressed area at its apex (Fig. 47); anterior parallel lines ridged, visible in basal third of mesoscutum; notaulices wide at apex, tapering at base, distinct and crenulate; lateral lines indicated at apex of mesoscutum, scutellum with two foveae at base separated by a septum, lateral margins of scutellum reticulate-coriaceous; scutellar spine broad-based, arising from a point near middle of truncate scutellum, measured from apex of scutellum subequal to length of mesoscutum and tapering to a sharp point (Fig. 47); spine viewed laterally curved upward. Vertex generally incised (Fig. 48) *PROSASPICERA* Kieffer (p. 104)
 - Mesoscutum shiny with fine reticulate sculpture between strong widely spaced transverse strigose sculpture; median scutal line and parallel lines continued from base of scutellum to centre of mesoscutum, median scutal line forming a triangular area at apex; notaulices wide, distinct and crenulate, lateral lines indicated as ridges. Scutellar foveae separated by a septum; lateral margins of scutellum strigose, apex of scutellum truncated, spine arising at a

ANACHAROIDES Cameron (p. 94)

point close to apex of scutellum, not involving apex of scutellar foveae, distinctly shorter than mesoscutum (Fig. 33). Vertex not incised, at most arched, occipital carinae not pronounced

ASPICERA Dahlbom

ANACHAROIDES Cameron

Anacharoides Cameron, 1904a : 160. Type-species: *Anacharoides striaticeps* Cameron, by original designation and monotypy.

Coelonychia Kieffer, 1910c : 19–20. Type-species: *Coelonychia spinosipes* Kieffer, by monotypy. [Synonymised by Weld, 1930b : 139.]

DIAGNOSIS. ♀ antenna 13-segmented, weakly subclavate, sometimes moniliform; ♂ antenna filiform, 14-segmented with modified third segment. Head viewed frontally with eyes generally as far apart as the height of an eye (cf. Fig. 74), frontal carinae extending from outer margin of antenna to lateral ocellus, occiput strongly striated, occipital carinae distinct. Pronotum angular on anterior margin (cf. Fig. 44). Mesoscutum with notaules distinct, median scutal line, anterior parallel and lateral lines present or indicated. Scutellum viewed dorsally with apical depression, base of scutellum with foveae. Mesopleurae generally sculptured on lower half, with variable sculpture above to a completely polished surface. Gaster with segment 1 (petiole) longer than broad, smooth, segment 2 liguliform, segment 3, viewed laterally, the largest, generally punctate on lateral and dorsal surfaces. Hind tibia longitudinally ridged or furrowed with distinctive suberect spines on outer margins (Fig. 46). Radial cell of forewing open on base and front margin.

DISTRIBUTION. South Africa; Malawi.

Key to species of *Anacharoides* Cameron

Females (unknown in *astrida*)

- 1 Apical segment of antenna longer than segment 3 and longer than 11 plus 12, segments 3 and 4 not swollen (Fig. 59).
 - Scutellum with apical depression rounded on basal margin; scutellar foveae angled with a small triangular depression at base (Fig. 60), apex of scutellum arched
 - elongaticornis* Benoit (p. 98)
 - Apical segment of antenna equal to or shorter than segment 3, only rarely as long as segments 11 plus 12 (Fig. 87) 2
- 2 Inner basal margin of apical scutellar depression viewed dorsally almost straight medially, side margins of depression straight, rarely converging basally, apex of depression sometimes arcuate, the whole more generally appearing square (Figs 61, 62) 3
 - Inner basal margin of apical scutellar depression strongly arched medially, sometimes arcuate on apical margin (Fig. 63), side margins of apical scutellar depression converging towards base, viewed dorsally, apical scutellar depression usually wider than long measured at centre (Fig. 63) 7
- 3 Mesoscutum medially with strong widely spaced broken transverse rugae on a reticulate surface, anterior parallel lines distinct anteriorly in first quarter, not converging (Fig. 64).
 - Hind coxae swollen, strongly coriaceous and pubescent with a smooth shiny area on inner margin. Forewings with veins *Sc+R* angled at a point where *R*₁ would normally emanate (Fig. 65). *Rs*₂ weakly projecting along wing margin. Antennal segment 13 shorter than 3 (Fig. 66) *stygius* Benoit (p. 103)
 - Mesoscutum either with closely spaced regular rugae or finely reticulate-coriaceous 4
- 4 Forewing with *Rs*₂ projecting along wing margin (Fig. 67). Pronotum without a median tooth 5
 - Forewing with *Rs*₂ not projecting along wing margin (Fig. 68). Pronotum with a small tooth medially (Fig. 82) *suspensus* sp. n. (p. 104)
- 5 Anterior parallel lines distinct, converging to join scutal furrow, notaules crenulate, wide at apex, narrow basally. *Rs*₂ of forewing not reaching wing margin but weakly extended, *Rs*₁ of radial cell not sharply angled (Fig. 67) *paragi* Benoit (p. 101)
 - Anterior parallel lines obsolete. *Rs*₁ of forewing sharply angled or not angled 6
- 6 Mesoscutum reticulate medially with rugae at apex and base, notaules distinct, not crenulate, pubescence weak on outer margins of notaules, median scutal line complete, raised above the surface sculpture, triangular area extending halfway along mesoscutum; scutellar foveae

- elongate, shiny reticulate. Apical segment of antennae dark, remainder orange-yellow. R_1 of forewing weakly indicated (Fig. 69) *sanitas* sp. n. (p. 102)
- Mesoscutum finely reticulate, notaulices crenulate, complete, whole surface of mesoscutum covered with hairs obscuring notaulices, median scutal line complete, obscured by pubescence; apical depression of scutellum angular at apex; scutellar foveae round, smooth and polished. Apical segment of antennae variable in colour, remaining segments orange-yellow. R_1 of forewing not indicated *quadrus* sp. n. (p. 101)
- 7 Mesoscutum with widely spaced strong irregular transverse rugae medially on finely reticulate surface; notaulices with crenulations, median scutal line extending at least to the middle of the mesoscutum (Fig. 63).
Antennae yellow or yellow with the apical segments dark yellow 8
- Mesoscutum finely reticulate-coriaceous, at most with weak transverse rugae on outer margins of notaulices; median area finely reticulate, notaulices either distinct or in the form of widely spaced crenulations, median scutal line either complete or not reaching past middle of mesoscutum 9
- 8 Mesoscutum at most with fine scattered pubescence, surface finely reticulate-coriaceous between widely spaced transverse rugae, notaulices with widely spaced crenulations, pubescence sparse, not obscuring sculpture, anterior parallel lines converging to join at median scutal line (Fig. 63), apex of median scutal line in form of a small triangular polished area apically, fading out before reaching middle of mesoscutum. $Sc+R$ of forewing weakly angled at point where R_1 would emanate if present, Rs_2 strongly curved, weakly extended along the wing margin, $2rm$ short and broad (Fig. 86) *striaticeps* Cameron (p. 103)
- Mesoscutum with long scattered pubescence, its surface reticulate-coriaceous between strong transverse rugae; notaulices wide with close crenulations but obscured by scattered pubescence, anterior parallel lines obscured by whitish pubescence, median scutal line obscured by long hairs, not distinctly widened at apex, merging into the transverse rugae of mesoscutum. Radial cell of forewing with $Sc+R$ angled at point close to where R_1 would emanate, Rs_2 weakly curved, strongly extended along wing margin, $2rm$ long and narrow (Fig. 70) *arcus* sp. n. (p. 96)
- 9 Forewing with Rs_2 not reaching wing margin, extended weakly below margin (Fig. 71). Median scutal line distinct. Head, mesoscutum and mesopleurae either completely black or reddish orange 10
- Forewing with Rs_2 reaching wing margin, not extended along margin (Fig. 72). Median scutal line obsolete, at most with weak triangular area at apex. Head and mesoscutum never completely black, variably red- to black-marked 11
- 10 Median scutal line complete with a triangular depression at apex, deeply impressed, extending to middle of mesoscutum (Fig. 75). Head, mesonotum and mesopleurae completely black, gaster bright yellow *nigra* sp. n. (p. 117)
- Median scutal line incomplete with a small triangular shallow depression at apex not extending to middle of mesoscutum (Fig. 76). Head, mesonotum and mesopleurae reddish orange to brownish, gaster chestnut-brown *decellius* sp. n. (p. 97)
- 11 Mesoscutum finely reticulate-coriaceous with weak transverse rugae on inner margins basally, median area without pubescence, median scutal line obsolete in basal half, triangular area at base distinct, extending to a point midway on mesoscutum (Fig. 77), notaulices complete, distinct with close shallow crenulations; scutellar foveae deep basally, polished. Colour orange-yellow *pallida* sp. n. (p. 100)
- Mesoscutum densely pubescent on a fine reticulate-coriaceous surface, notaulices with widely spaced crenulations obscured by pubescence, median scutal line obsolete basally, visible in apical quarter, triangular area at apex weak and obscure (Fig. 73); scutellar foveae shallow. Viewed dorsally, head orange-yellow, mesoscutum dark brown except apex orange-yellow, scutellum orange-yellow, gaster chestnut-brown *eurytergis* Benoit (p. 100)

Males (unknown in *elongaticornis*, *nigra*, *pallida*, *paragi* and *stygius*)

- 1 Segment 3 of antenna weakly expanded apically, slightly curved, never with flattened surface on basal half (Fig. 78) 2
- Segment 3 of antenna generally strongly expanded apically and medially, always with basal half distinctly narrower than apex and flattened (Fig. 79) 3
- 2 Segments 4–14 of antenna moniliform, not swollen distally; notaulices distinct and crenulate, anterior parallel lines converging to join median scutal line; apical depression of scutellum

- without triangular-shaped area at base; median scutal line with obsolete horseshoe-shaped area at apex, mesoscutum reticulate-coriaceous with scattered pubescence *quadrus* sp. n. (p. 101)
- Segments 4-6 of antenna weakly swollen distally (Fig. 80); notaulices weakly crenulate, apical depression of scutellum viewed dorsally with pronounced triangular-shaped area at base, median scutal line strongly raised, the apical area in form of acute triangular shape extending to middle of mesoscutum, mesoscutum reticulate with scattered pubescence on outer margins of notaulices *arcus* sp. n. (p. 96)
- 3 Segment 3 of antenna strongly expanded on outer apical margins, segments 4-14 moniliform or only very weakly expanded medially (Figs 79, 84) 4
- Segments 3 and 4 of antenna swollen or expanded apically on outer margins, base of segments clearly narrower than apex (Fig. 81) 5
- 4 Mesoscutum with closely spaced strong transverse rugae between notaulices, median scutal line triangular at apex and transversely striated (Fig. 82), notaulices distinct, not obscured by the fine pubescence. Head and thorax predominantly red-reddish brown, hind coxae strongly swollen (Fig. 83) *suspensus* sp. n. (p. 104)
- Mesoscutum without transverse rugae, surface fine reticulate-coriaceous, notaulices distinct but obscured by fine scattered pubescence. Head and thorax completely black, hind coxae long and narrow (Fig. 85) *decellius* sp. n. (p. 97)
- 5 Segments 3 and 4 of antenna swollen at apex, 5-14 moniliform (Fig. 87) *striaticeps* Cameron (p. 103)
- Segments 3-5 of antenna swollen on outer margins (Fig. 88) 6
- 6 Segments 3-5 of antenna distinctly swollen on outer margins apically, 6-14 moniliform, notaulices distinct, without crenulations, mesonotum finely reticulate-coriaceous. Head black suffused with red, thorax reddish black *sanitas* sp. n. (p. 102)
- Segments 3-6 of antenna swollen apically. Head and thorax completely black 7
- 7 Segments 3-6 of antenna distinctly swollen apically, 7-14 moniliform (Fig. 91). Mesoscutum fine reticulate-coriaceous with closely spaced broken rugae medially, not pronounced *eurytergis* Benoit (p. 99)
- Segments 3-7 of antenna distinctly swollen apically (Fig. 90), segment 8 very weakly swollen, 9-14 moniliform. Mesoscutum fine reticulate-coriaceous with widely spaced transverse rugae, notaulices deeply crenulate *astrida* sp. n. (p. 97)

Anacharoides arcus sp. n.

(Figs 44, 70, 80)

DESCRIPTION. ♀. Antenna 13-segmented, segment 3 longer than apical segment, shorter than 4 and 5. SN 3-13 = AR 50 : 28 : 28 : 25 : 25 : 20 : 20 : 20 : 20 : 20 : 45. ♂ antenna 14-segmented, segment 3 subequal in length to 4 plus 5, 3 weakly curved on outer margin, 4, 5 and 6 expanded apically (Fig. 80). Head viewed frontally with eyes closer together than height of eye measured midway between eyes, vertex incised, frontal carinae distinct, face reticulate-rugose, pubescent on the inner orbits, occiput strongly striated, strigose between lateral ocellus, vertex incised, pronotum viewed dorsally angled on the basal side margins, mesoscutum with reticulate surface sculpture and transverse rugae, anterior parallel lines aberrant, obscured by pubescence, notaulices in form of weak crenulate suture, complete, median scutal line indistinct basally, ending in weak triangular area apically, obscured by the surface sculpture of mesoscutum, scutellar fovea extending half the length of scutellum, finely sculptured, the apex of each fovea triangular, separated by a septum, apical depression of scutellum, arcuate with strong raised margins, lateral bars of scutellum reticulate. Mesopleural carinae distinct, the surface below carinae sculptured and pubescent, carinae of propodeum bowed. Segment 1 of gaster petiolate, sulcate, three times as long as broad, segment 2 of gaster liguliform, segment 3 the largest, closely punctate on apical half in dorsal and lateral views, propodeum and coxae strongly pubescent. Hind tibia with longitudinal furrow and suberect spines on outer margin viewed dorsally. Colour: ♀ antenna dark yellow, apical segments dark, legs brownish yellow, head brownish orange, pronotum reddish orange on front margin; mesopleura dark brownish red; mesoscutum blackish on front and side margins; apex reddish orange; scutellum reddish orange; gaster chestnut-brown; ♂, antenna and legs yellow, head and thorax black, scutellum and gaster chestnut-brown. Radial cell of forewing completely open at base and on wing margin, veins $Rs+M$ not indicated, Rs_2 weakly extended along margin of wing, R_2 not indicated, wing surface with long scattered cilia on apical third and scattered shorter cilia on remainder, wing margin with a distinct hair fringe apically.

MATERIAL EXAMINED

Holotype ♀, **Rwanda**: env. Astrida, 1954/1955 (*G. Foucart*) (MRAC, Tervuren).

Paratypes. **Rwanda**: 1 ♂, same data as holotype (badly damaged) (MRAC, Tervuren). **Uganda**: 1 ♀, Kampala, 24.x.1921 (*H. Hargreaves*) (BMNH).

REMARKS. This species is closely related to *striaticeps* but is distinguished by the long scattered pubescence on the mesoscutum.

Anacharoides astrida sp. n.

(Fig. 90)

DESCRIPTION. ♂. Antenna 14-segmented. Segment 3 of antenna as long as 3 plus 4, 3–8 each strongly swollen, remaining segments moniliform (Fig. 90). Head viewed frontally strongly reticulate and pubescent, eyes as far apart as the height of an eye, vertex arcuate, frontal carinae on inner orbits of eye crenulate, head viewed dorsally with frontal carinae extending from lateral ocellus, enclosing a finely reticulate area with transverse rugae, occiput strongly striated. Pronotal plate produced, pubescent either side with pronounced foveae medially; pronotum viewed dorsally angular, pubescent, mesoscutum finely reticulate with widely spaced irregular rugae striate on side margins, anterior parallel lines distinct in basal third, median scutal line complete, widened in apical quarter, notaulices complete, crenulate, obscured by the pubescence on the surface of mesoscutum; scutellum with apical depression almost quadrate, weakly arched on basal margin, scutellar foveae rounded basally, wider than apical half with fine reticulate area between apex and apical depression, apex of depression almost straight, sides of scutellum with large reticulate-rugose surface sculpture. Mesopleurae below mesopleural suture densely pubescent; carinae of propodeum almost parallel. Gaster with segment 1 smooth, petiolate, twice as long as broad, segment 2 liguliform, segment 3 viewed laterally the largest, densely punctate, remaining segments not visible. Hind tibia longitudinally ridged or furrowed with pronounced suberect spines on outer margin. Colour: antenna and legs orange-yellow, head and thorax black, gaster dark chestnut-brown. Forewing with short apical hair fringe, surface with widely scattered short pubescence, R_2 of forewing weakly produced on wing margin, R_1 absent, i.e. radial cell completely open at base, $Sc+R$ not conspicuously angled at point where R_2 would normally emanate.

♀ not known.

MATERIAL EXAMINED

Holotype ♂, **Rwanda**: env. Astrida, 1954/1955 (*G. Foucart*) (MRAC, Tervuren).

Paratypes. **Tanzania**: 1 ♂, Ngorongoro, Pest Camp, 2400–2500 m, 6–19.vi.1957 (*P. Basilewsky & N. Leleup*) (MRAC, Tervuren). **Zaire**: 1 ♂, Kivu Sac (Lac Kivu), 1460 m, 19–22.ii.1934 (*G. F. de Witte*) (MRAC, Tervuren); 1 ♂ Secteur Tshiaberimu, Clieu-dit, 2450 m, 24.iii.1954 (*P. Vanschuytbroeck & H. Synave*) (MRAC, Tervuren); 1 ♂, P.N.A. Secteur Tshiaberimu, Riv. Kalvina, affl. dr. Talia N. 2720 m, 27.iii.1953 (*P. Vanschuytbroeck & V. Hendricx*); 1 ♂, Secteur Tshiaberimu, riv. Talia Nord, 2340 m, 28.iii.1954 (*P. Vanschuytbroeck & H. Synave*) (MRAC, Tervuren).

REMARKS. Distinguished from *eurytergis* Benoit by the seventh antennal segment being swollen apically.

Anacharoides decellius sp. n.

(Figs 76, 84, 85)

DESCRIPTION. ♀. Antenna 13-segmented, weakly subclavate, segment 3 longer than apical segment, shorter than 4 and 5. SN 1–13=AR 5 : 3 : 18 : 12 : 12 : 11 : 9 : 9 : 10 : 10 : 9 : 9 : 10. The apical segment darker than remainder. ♂ antenna 14-segmented, segment 3 expanded apically, 3 and 4 very weakly swollen medially on outer margin, remaining segments moniliform. Head viewed frontally with eyes as far apart as height of eye, vertex incised, frontal carina extending from outer margin of antenna to lateral ocellus, enclosing a reticulate area with weak transverse rugae, face below antenna with dense pubescence; occipital carinae pronounced, occiput strongly striate. Pronotum viewed dorsally, angular on side margins which are striated, with a small pronotal plate medially. Mesopleurae smooth and polished, mesosternum pubescent, mesonotum finely reticulate, notaulices distinct, not crenulate, median scutal line visible in apical quarter only as a triangular area, anterior parallel lines absent, surface of mesoscutum with fine scattered pubescence; scutellar foveae extending past middle of scutellum deep and polished, angular at apex, apical depression of scutellum rounded on basal margin, scutellum with

triangular area medially between foveae and apical depression, sides of scutellum strongly rugose, propodeum smooth and polished, carinae almost parallel, bowed at either end. Gaster with segment 1 smooth and polished, twice as long as wide, segment 2 liguliform, segment 3 the largest, closely punctate on lateral and dorsal margins, sides of propodeum and coxae pubescent, hind tibia with longitudinal furrow and suberect spines on outer margin viewed dorsally. Colour: ♀ antenna orange-yellow except apical segment dark brownish, legs brownish with yellowish tarsal segments, head reddish yellow, pronotum reddish dorsally, brownish laterally, mesoscutum black dorsally, scutellum reddish yellow, gaster chestnut-brown; ♂ head and thorax black. Radial cell of forewing completely open at base and on wing margin, veins $Rs+M$ not indicated, Rs_2 weakly extended along margin of wing. Wing surface ciliate, apical margin of wing with hair fringe, surface of wing with short scattered hairs apically.

MATERIAL EXAMINED

Holotype ♀, **South Africa**: Natal, Kloof, 1500 ft [450 m], August (*R. E. Turner*) (BMNH).

Paratypes. **Ethiopia**: 8 ♀, Mt Chillala Forest, circa 9000 ft [2700 m], 12.xi.1926 (*H. Scott*); 1 ♂, same data except 27.xi.1926 (BMNH); 1 ♂, Harrar, iii.1939 (*H. C. Taylor*) (BMNH). **Kenya**: 1 ♀, Chiromo, 7.viii.69, ex *Allograph calopus* (BMNH). **Nigeria**: 1 ♀ Njawai, NE. State, 24.viii.1973 (*J. T. Medler*) (BMNH). **Rhodesia**: 1 ♀, Chishawasha, nr Salisbury, ii.1978 (*A. Watsham*) (BMNH). **South Africa**: 6 ♀, Port St Johns, Pondoland, 1–14.v.1923 (*R. E. Turner*) (BMNH); 2 ♀, same data except 15–31.v.1923 (BMNH); 1 ♀, same data except 5–30.iv.1923 (BMNH); 2 ♀, same data except 12–30.vi.1923 (BMNH); 1 ♀, same data except 10–31.vii.1923 (BMNH); 4 ♂, same data except 12–30.vi. (*R. E. Turner*) (BMNH); 1 ♂, same data except 1–11.vi.1923 (BMNH); 1 ♀, Natal Kloof, 1500 ft [450 m], viii.1926 (*R. E. Turner*); 1 ♂, Natal, Weenen, vi.1925 (*H. P. Thomasset*) (BMNH); 1 ♀, Cape Province, Mossel Bay, v.1930 (*R. E. Turner*) (BMNH); 1 ♀, same data except x.1931 (BMNH) 1 ♂, same data except v.1930 (*R. E. Turner*) (BMNH); 1 ♀, Assegaaibosch, E. Stellenbosch, 4–5.i.1972 (BMNH). **Uganda**: 1 ♂, Kazhara, iii.1939 (*H. C. Taylor*) (BMNH). **Zaire**: 2 ♀, Secteur Nord, riv. Butahu, affl. Semliki, 1420 m, 26.vi.1957 (*P. Vanshuytbroeck*) (MRAC, Tervuren); 1 ♀ Mont Hoyo, 1250 m, 'sur plantes bases', 1–15.vii.1955 (*P. Vanshuytbroeck*) (MRAC, Tervuren); 1 ♀, Secteur Tshiaberimu, Mon. Kitwa, 2840 m, 29.viii.–7.ix.1953 (*P. Vanshuytbroeck & V. Hendricx*) (MRAC, Tervuren); 1 ♀, Massif Ruwenzori, ri. Kaklari, affl. Bombi (*P. Vanshuytbroeck & H. Synave*) (MRAC, Tervuren).

REMARKS. This species has close affinities with *nigra* but lacks the complete median scutal line and bright yellow gaster. The male resembles *suspensus* but is distinguished by the absence of transverse rugae on the mesoscutum.

Anacharoides elongaticornis Benoit

(Figs 45, 59, 60)

Anacharoides elongaticornis Benoit, 1956: 201. Holotype ♀, ZAIRE (MRAC, Tervuren) [examined].

DESCRIPTION. ♀. Antenna 13-segmented, moniliform, 3 shorter than 4 plus 5, 4 and 5 equal, 6–12 subequal in length, 13 twice length of 12 (Fig. 59), 5–13 with rhinaria indicated. SN 1–13=AR 4:2:8:5:5:5:5:5:5:4:5:4:5:4:4:9. Head viewed from the front with eyes as far apart as height of an eye, frontal carina extending from outer margin of antenna to lateral ocellus, enclosing a rugose area, vertex incised, occiput strongly striated with strong curved striae. Pronotum viewed dorsally strongly coriaceous, angled on margins, mesoscutum with strong coriaceous-reticulate surface, anterior parallel lines indicated, notaulices complete though obscured in sculpture and by pubescence, median scutal line weakly indicated posteriorly; scutellum viewed laterally with pointed apex, fine coriaceous, viewed dorsally with apical depression, scutellar foveae not extending past middle of scutellum, separated by a septum, the surface coriaceous, the apex of each fovea angled, with a small triangular depression in front of apical depression, lateral bars with fine coriaceous sculpture, apex of scutellum arched (Fig. 60), propodeum with bowed carinae, sides densely pubescent. Mesopleura smooth and polished, episternum with longitudinal striae. Segment 1 of gaster petiolate, twice as long as wide, segment 2 liguliform, segment 3 the largest, closely punctate on lateral and dorsal margins of the upper apical half. Hind tibia with longitudinal furrows and suberect spines on outer margins, basitarsi as long as remaining combined segments.

Colour: antenna yellowish, head dark blackish red, thorax black, gaster black, front and middle legs yellowish, hind legs blackish brown, tarsi yellow. Forewing surface with widely scattered short pubescence, apical hair fringe very short, radial open on front and basal margins, Rs_2 almost closing wing

margin (vein at juncture with wing margin barely pigmented) (Fig. 45), veins R_s+M not indicated, M (cubitus) weakly indicated.

♂ unknown.

MATERIAL EXAMINED

Holotype ♀, **Zaire**: Uele Paulis, xii.1947 (*P. L. G. Benoit*) (MRAC, Tervuren).

Anacharoides eurytergis Benoit

(Figs 72, 73, 74, 91)

Anacharoides eurytergis Benoit, 1956: 195–196. Holotype ♀, **Zaire** (MRAC, Tervuren) [examined].

DESCRIPTION. ♀. Antenna 13-segmented, moniliform, 3 shorter than 4 plus 5, 4 and 5 subequal, 5 and 6 subequal, 6 longer than 7, 7 and 8 subequal, 8 longer than 9, 9 shorter than 10, 10 equal to 7, 10 and 11 equal, 11 shorter than 12, 13 twice as long as 12. SN 1–13=AR 8:3:11:6.5:6:6:5:5:4.5:5:5:5.5:11, segments 6–13 of equal width, 1st segment the widest. ♂. Antenna 14-segmented, segment 3 the longest, strongly excavated on outer margin, 4–6 distinctly swollen. SN 1–14=AR 6.3:3:14:10:10:10:8:8:8:8:8:8:11.5. Head viewed frontally with eyes as far apart as the height of an eye, frontal carina extending from outer margin of antenna to lateral ocellus, enclosing a finely reticulate, coriaceous area with transverse rugae, lower face pubescent, vertex incised (Fig. 74), occiput strongly striate with a strong occipital carina. Thorax: pronotum viewed dorsally strongly sculptured, obliquely angled apically with a small plate produced forward on front margin, surface of mesoscutum reticulate-coriaceous, obscured by dense pubescence, notaulices with widely spaced crenulations, median scutal furrow obsolete basally, visible apically, anterior parallel lines indicated, scutellum viewed laterally with pointed apex, reticulate rugose, viewed dorsally with apical depression; scutellar fovea extending past middle of scutellum, foveae separated by a septum and highly polished on basal half, apical half of each fovea elongated and weakly strigose, posterior part margined and excavate, without median carina; propodeum with bowed carinae. Mesopleurae smooth and polished, episternum sculptured. Segment 1 of gaster petiolate, longer than broad, smooth segment 2 of gaster liguliform, segment 3 the largest, closely punctate in the lateral and dorsal areas of the upper apical half. Hind tibia with a longitudinal furrow and suberect spines on outer margins. Colour: ♀, head, apex of mesoscutum, thorax and mesopleurae red, gaster black, front and middle legs yellow to brown, hind legs brownish black; ♂, head, thorax and hind legs black, antenna reddish brown basally, black at apex, front and middle legs brownish yellow. Surface of forewings with widely scattered short pubescence, apical hair fringe short, radial cell completely open at base and on wing margin, R_1 not indicated, $Sc+R$ at point where R_1 would emanate, angled (Fig. 72), veins R_s+M not indicated, R_{s2} not reaching margin of wing.

MATERIAL EXAMINED

Holotype ♀, **Zaire**: Kivu, Ibanda, 1952 (*M. Vandelannoite*) (MRAC, Tervuren).

Nigeria: 2 ♀, W. State, Owena, ii.1970 (*J. T. Medler*) (BMNH); 1 ♀, Umuahia, Crin, EC. State, 10.iv.1975 (*J. T. Medler*) (BMNH). **Rhodesia**: 3 ♂, Chishawasha, nr Salisbury, ii.1978 (*A. Watsham*) (BMNH). **South Africa**: 1 ♀, 5 ♂ Grahamstown, Southwell Rd, em. xi.1975, ex pupa of *Ischiodon aegyptus* reared on *Aphis nerii* on *Gomphocarpus physocarpus* (*J.B.*) (BMNH); 4 ♀, Zululand, Eshowe, vii.1926 (*R. E. Turner*) (BMNH); 3 ♀, Port St. Johns, Pondoland, 1–14.v.1923 (*R. E. Turner*) (BMNH); 2 ♀, same data except date, 1–11.vi.1923; 1 ♀, same data except 5–30.iv.1923; 1 ♀, same data except 12–30.vi.1923; 1 ♂, same data except 15–31.v.1923 (*R. E. Turner*) (BMNH); 1 ♀, Asseganibosch, E. Stellenbosch, 4–5.i.1972 (BMNH); 2 ♀, Natal, Kloof, 1500 ft, 450 m, viii.1926 (*R. E. Turner*) (BMNH); 1 ♀, Cape Province, Somerset East, x.1930 (*R. E. Turner*) (BMNH). **Zaire**: 2 ♂, Secteur Tshiaberimu, riv. Talia, Nord, 2340 m, 28.iii.1954 (*P. Vanschuytbroeck & H. Synave*) (MRAC, Tervuren); 1 ♂, same data except 23.iii.1954 (MRAC, Tervuren); 1 ♂, Secteur Tshiaberimu Husiangwa aff. Musabaki, 19.iii.1954 (*P. Vanschuytbroeck & H. Synave*) (MRAC, Tervuren); 1 ♂ (allotype), same data as holotype; 1 ♂ (paratype), Rwanki, 15.ii.1952 (*J. Leroy*) (MRAC, Tervuren).

Anacharoides nigra sp. n.

(Figs 71, 75, 105)

DESCRIPTION. ♀. Antenna 13-segmented, subclavate, segment 3 subequal to apical segment, shorter than 4+5, segment 3 weakly curved apically, 4–12 moniliform, each progressively shorter than the preceding

one, SN 3-13=AR 50:30:30:25:25:25:24:20:20:20:47. Head viewed frontally with eyes as far apart as height of an eye measured midway between the eyes, frontal carina pronounced, extending from outer margin of antenna to lateral ocellus, face coarsely reticulate rugose with fine pubescence, vertex incised, occiput strongly striated. Lateral margins of pronotum viewed dorsally angular. Mesoscutum dull, finely coriaceous, with very weak scattered transverse aberrant rugae and hairs, median scutal line visible in apical two-thirds, forming a long triangular impressed area, notaulices distinct, crenulate, wider at apex than at base, anterior parallel lines obsolete, lateral lines weakly indicated; scutellum viewed laterally with pointed apex dorsally with apical depression, strongly arched on basal margin. Scutellar foveae extending to middle of scutellum with apical area merging into a triangular shape in front of apical depression, sides of scutellum variably reticulate, carinae of propodeum parallel at midway point, converging at top; mesopleurae smooth and polished. Gaster with segment 1 petiolate, weakly furrowed, less than three times as long as broad, segment 2 liguliform, segment 3 the largest, closely punctate on apical two-thirds. Hind tibia longitudinally ridged or furrowed with suberect spines on the outer margins, hind coxae viewed dorsally longer than petiole, strongly swollen with long pubescence on outer margins, inner margins flattened. Colour: antenna, legs and gaster orange-yellow, head and thorax black. Forewings with apical hair fringe, surface with a few dotted hair bases at basal half, Rs_2 of forewing weakly produced, not reaching margin of wing, vein R_1 absent, i.e. radial cell open at base and on wing margin. $Sc+R$ angled at point where vein R_1 would normally be.

♂ unknown.

MATERIAL EXAMINED

Holotype ♀, **Uganda**: Kawanda, viii.1943 (*T. H. C. Taylor*) (BMNH).

Paratype. **Zaire**: 1 ♀, P. N. A. Secteur Tshiaberimu Riv. Mbulikere, affl. dr. Talia N. 2700 m, 26-28.viii.1953 (*P. Vanschuytbroeck & V. Hendricx*) (MRAC, Tervuren).

REMARKS. Closely related to *decellius* but distinguishable on characters given in the key.

Anacharoides pallida sp. n.

(Figs 77, 93)

DESCRIPTION. ♀. Antenna 13-segmented, weakly subclavate, segment 3 shorter than 4+5, 4 and 5 subequal, 6 and 7 subequal, 8 shorter than 7, 9-12 shorter than 8, subequal. SN 1-13=AR 12.5:4.5:22.5:12.5:12.5:11:11:10:7.5:7.5:7.5:7.5:15. Head viewed frontally with eyes as far apart as the height of an eye, frontal carinae crenulate, extending from outer margin of antenna to lateral ocellus, enclosing a fine rugose area with strong transverse rugae in upper area, vertex incised, subantennal sutures pronounced, face pubescent, occiput strongly striated. Pronotum viewed dorsally obliquely angled with a small protrusion medially; surface of mesoscutum finely reticulate-coriaceous with traces of weak transverse rugae on inner margins basally, anterior and lateral lines obsolete, median scutal line very weakly present in basal half, diverging to form a small obscure triangular area at apex, weakly strigose; notaulices complete and distinct with weak shallow crenulations. Scutellum viewed laterally, pointed, dorsally with apical depression straight on apical margin, base of depression arched, scutellar fovea elongate, polished, not extending past middle of scutellum, scutellar foveae separated by a broad septum, lateral bars broad, not sculptured, apical depression with a triangular area between its base and apex of scutellar foveae, scutellar disc with strong reticulate sculpture, mesopleurae polished with light pubescence below the mesopleural suture, carinae of propodeum weakly bowed. Segment 1 of gaster slightly longer than broad, petiolate, smooth and polished, segment 2 liguliform, segment 3 the largest, strongly punctate, remaining segments enclosed by the third. Hind coxae swollen, weakly pubescent, hind tibiae longitudinally ridged or furrowed with suberect spines on the outer margins. Colour: antenna orange-yellow, head, thorax and legs reddish orange, gaster reddish orange dorsally, yellow basally. Forewings with apical hair fringe, apical surface with scattered hairs, remainder dotted with hair bases, Rs_2 of forewing extending to margin of wing, not extended along margin, radial cell completely open at base, $Sc+R$ angled at point where vein R_1 would normally be.

♂ unknown.

MATERIAL EXAMINED

Holotype ♀, **South Africa**: E. Cape Province, Kathberg, 11-18.ii.1938 (*R. E. Turner*) (BMNH).

REMARKS. This species has close affinities with *eurytergis* but lacks the dense pubescence.

Anacharoides paragi Benoit

(Fig. 67)

Anacharoides paragi Benoit, 1956 : 200. Holotype ♀, ZAIRE (MRAC, Tervuren) [examined].

DESCRIPTION. ♀. Antenna 13-segmented, moniliform, weakly clavate, rhinaria present on segments 3–13, 3 shorter than 4+5, segments 6–12 gradually decreasing in length, segment 3 twice the length of 8, 9, 10, 11 or 12, 13 equal in length to segment 3, as long as 11+12. SN 1–13=AR 6 : 2 : 8 : 7 : 5 : 5 : 5 : 4 : 4 : 4 : 4 : 8. Head viewed from front with eyes as far apart as height of an eye, frontal carina extending from outer margin of antenna to lateral ocellus and enclosing a reticulate area, vertex incised, occiput strongly striate with strong occipital carinae. Pronotum viewed dorsally obliquely angled apically, mesoscutum reticulate rugose; notaulices complete and distinct with crenulations on apical section, the side margins of mesoscutum with short pubescence, median scutal furrow indicated posteriorly, anterior margins of mesoscutum with strigose sculpture; scutellum viewed laterally with pointed apex, reticulate rugose, viewed dorsally with apical depression, scutellar foveae round, extending past middle of scutellum, separated by a septum, apex of scutellum with large depression, straight on apical margin, sides of scutellum strongly reticulate rugose; carinae of propodeum weakly bowed at anterior. Mesopleura smooth and polished, suture distinct. Segment 1 of gaster petiolate, longer than broad, smooth, segment 2 of gaster liguliform, segment 3 the largest, closely punctate dorsally and laterally. Hind tibia with longitudinal furrows with dense comb of hairs on inner margin and a row of widely spaced spines on outer margin. Colour: antenna, head and thorax reddish brown, legs yellow to reddish brown, gaster chestnut-red-black. Surface of forewing with widely scattered hair bases and a few short hairs near apex, hair fringe on wing margin very short, vein Rs_2 thin, not reaching margin, R_1 absent, $Rs+M$ and M not indicated (Fig. 67), $Sc+R$ angled at point where R_1 would emanate.

♂ unknown.

MATERIAL EXAMINED

Holotype ♀, Zaire: Gandajika, 22.iii.1947 (*P. Henrard*) (MRAC, Tervuren).

Ghana: 1 ♀, Kumasi, Kwadaso, 28.iii.1977 (*Scheibelreiter*) (BMNH). Nigeria: 1 ♀, Umuahia Crinec State, 10.iv.1975 (*J. T. Medler*); 1 ♀, Zungeru, xi.1910 (*J. W. Scott-Macfie*) (BMNH); 4 ♀, Ile-Ife, W. State, v.1973 (*J. T. Medler*) (BMNH). Rhodesia: Chishawasha, nr Salisbury, ii.1978 (*A. Watsham*) (BMNH). Sierra Leone: 2 ♀, Njala, 2–15.i.1932 and 1931, ex syrphid puparium (*E. Hargreaves*) (BMNH). Uganda: 2 ♀, Kampala, 6.x.1928 and 8.x.1928, ex *Paragus burbonicus* (*G. L. R. Hancock*) (BMNH); 1 ♀, Kawanda, vi.1941 (*T. H. C. Taylor*). Zaire: 1 ♀ (paratype), same data as holotype except 5.iii.1948 (MRAC, Tervuren); 1 ♀, Haut-Uele, Moto, iv–v.1923 (*L. Burgeon*) (MRAC, Tervuren); 1 ♀, Leverille, ix.1920 (*P. Vanderjst*) (MRAC, Tervuren).

Anacharoides quadrus sp. n.

(Figs 78, 89)

DESCRIPTION. ♀. Antenna 13-segmented, very weakly subclavate, segment 3 longer than 4, shorter than 4+5, 4–6 subequal in length, 6–12 gradually decreasing in length, 13 as long as 3. SN 1–13=AR 10 : 3 : 15 : 9 : 9 : 9 : 9 : 7 : 7 : 7 : 7 : 6 : 15; apical segment darker than remainder. ♂ antenna moniliform, 14-segmented, segment 3 weakly expanded apically (Fig. 78), SN 1–5=AR 15 : 8 : 45 : 30 : 30. Head viewed frontally with eyes as far apart as height of eye, vertex incised, frontal carinae extending from outer margin of antennae to lateral ocellus, enclosing a reticulate area covered with scattered long hairs, occipital carina pronounced, occiput strongly striate. Lateral margins of pronotum with striations, pronotum viewed dorsally, angular, with a small pronotal plate on the front margin, no tooth present. Mesoscutum finely reticulate, covered with long white widely spaced hairs, median scutal line obscured by pubescence, notaulices complete with wide-spaced crenulations, obscured by long hairs, anterior parallel lines obsolete. Scutellum viewed laterally with pointed apex, dorsally with apical depression, not strongly arched on basal margin (almost straight), scutellar foveae elongate, extending past the middle of scutellum, basal half of foveae with triangular carinae (Fig. 89); sides of scutellum strongly rugose, carinae of propodeum almost parallel. Mesopleurae smooth and polished above the suture, densely pubescent below. Gaster with segment 1 petiolate, smooth, segment 2 liguliform, segment 3 viewed laterally the largest, closely punctate in dorsal and lateral margins, remaining visible segments punctate. Hind tibia longitudinally ridged or furrowed with pronounced suberect spines on outer margins. Colour: ♀ antenna, head, thorax and legs orange-red, gaster chestnut-brown, ♂ antenna, fore and mid legs yellowish,

head, mesonotum predominantly black, scutellar foveae reddish, hind legs brownish, gaster chestnut-brown. Forewings with apical hair fringe, surface with scattered hairs, Rs_2 of forewing produced along wing margin, vein R_1 absent i.e. radial cell completely open at base, $Sc+R$ angled at point where vein R_1 would normally be.

MATERIAL EXAMINED

Holotype ♀, **Rhodesia**: Salisbury, iv.1974 (*A. Watsham*) (BMNH).

Paratypes. **Rhodesia**: 2 ♂, Salisbury, same data as holotype (BMNH). **Uganda**: 1 ♂, 2 ♀, Kawanda, vii–viii.1943, ♂, viii.1942 (*T. H. C. Taylor*) (BMNH); 1 ♀, Bushenyi, iii.1939 (*T. H. C. Taylor*) (BMNH).

REMARKS. Related to the group of species with the apical depression of the scutellum appearing almost quadrate. The male is distinguished from all others by the shape of the antennal segments.

Anacharoides rufa (Kieffer)

Coelonychia rufa Kieffer, 1912: 451. Holotype, sex unknown, SOUTH AFRICA: Port Elizabeth (*Brauns*) (originally in MNHU, Berlin, now lost).

The holotype of this species cannot be traced. According to information received from Dr Königsmann in 1976 it could be in a collection on loan of which records have been lost.

Anacharoides sanitas sp. n.

(Figs 46, 62, 69, 88, 92)

DESCRIPTION. ♀. Antenna 13-segmented, filiform, 3 shorter than 4+5, SN 3–13=AR 12:7:7:7:7:7:6:6:6:6:12, 4–8 equal in length, 9–10 equal, 11–12 equal, 13 twice length of 12. ♂. Antenna with segment 3 swollen on apical half, longer than segment 4, less than 4+5 (Fig. 88), 4 and 5 swollen apically, remaining segments moniliform, subequal in length. Head viewed frontally with eyes as far apart as the height of an eye, frontal carina extending from outer margin of antenna to lateral ocellus, enclosing a rugose area (pentagonal area), vertex incised, occiput striated, striae curved (Fig. 92). Pronotum viewed dorsally angled on side front margins, mesoscutum with reticulate-rugose sculpture, anterior parallel lines indicated, notaulices complete with weak crenulate appearance, median scutal line complete, apical triangular area extending to middle of mesoscutum, lateral lines indicated. Scutellum viewed laterally with pointed apex, reticulate-rugose, viewed dorsally with apical depression, scutellar foveae extending past middle of scutellum, separated by a septum, the apex of each fovea triangular, enclosing between them a triangular area, apex of scutellum not arched, with a semicircular depression, lateral bars of scutellum striate (Fig. 62). Mesopleurae smooth and polished, episternum with longitudinal striae, propodeum with weakly bowed carinae, weakly pubescent either side of carinae. Segment 1 of gaster petiolate, longer than broad, smooth, segment 2 of gaster liguliform, segment 3 the largest, closely punctate on apical half dorsally and laterally. Hind tibia with longitudinal furrows and suberect spines on outer margins, with a dense pubescent comb of hairs on inner margin and a row of widely placed spines on outer margin. Colour: head red, pronotum red, mesoscutum reddish brown, gaster reddish on lateral margins, reddish brown at apex, antennae and legs reddish. Forewings with short apical hair fringe, surface with dotted hair bases, radial cell of forewing open on the margin and at base, Rs_2 not reaching margin of wing, cubitus (*M*) not indicated.

MATERIAL EXAMINED

Holotype ♀, **South Africa**: Cape Province, Mossel Bay, x.1921 (*R. E. Turner*) (BMNH).

Paratypes. **Ethiopia**: 1 ♀, Mt Zuguala, c. 9000 ft [2700 m], 22.x.1926 (*H. Scott*) (BMNH). **Kenya**: 1 ♀, Kiambu, 12.viii.1929 ex syrphid pupa (*R. H. Le Pelley*); 1 ♀, Mt Kenya, Kathita river, 9000 ft [2700 m], 9.viii.1949 (*J. A. Riley*) (BMNH). **Nigeria**: 1 ♀, Zaria, Samaru, 22.ii.1974 (*J. L. Musa*) (BMNH). **South Africa**: 1 ♀, Cape Province, Somerset East, 10–22.xii.1930 (*R. E. Turner*) (BMNH); 9 ♂, same data as holotype, varying dates (BMNH); 1 ♂, Cape Province, Mossel Bay, 28.vi.1938 (*R. E. Turner*) (BMNH); 1 ♂, Capetown, x.1937 (*R. E. Turner*) (BMNH); 1 ♀, Port St. Johns, Pondoland, 10–31.vii.1923 (*R. E. Turner*) (BMNH). **Uganda**: 1 ♀, Mt Elgon, 6.viii.1934 (*J. Ford*) (BMNH). **Yemen**: 2 ♀, Usaifira, 1 mile N. of Ta'izz, c. 4500 ft [1350 m], 12.xii.1937 (*H. Scott & E. B. Britton*) (BMNH); 1 ♂, Sanà, c. 7900 ft [2370 m], 19.i.1938 (*H. Scott & E. B. Britton*) (BMNH). **Zaire**: 1 ♀ Katanga, Dilolo, 24–27.vii.1931 (*J. Ogilvie*) (BMNH).

REMARKS. Resembles *quadrus* but is clearly separated from it on a number of characters as indicated in the key.

Anacharoides striaticeps Cameron

(Figs 63, 81, 86, 87)

Anacharoides striaticeps Cameron, 1904a : 160. Holotype ♀, SOUTH AFRICA (BMNH) [examined].
Coelonychia spinosipes Kieffer, 1910c : 19–20. Holotype ♀, MALAWI: Nord-Nyassa, Langenburg (*Fulleborn*) (originally in MNHU, Berlin, now lost?). (Synonymy by Weld, 1930 : 139.)
Anacharoides gibbosus Benoit, 1956 : 198. Holotype ♀, ZAIRE (MRAC, Tervuren) [examined]. **Syn. n.**

DESCRIPTION. ♀. Antenna 13-segmented, weakly clavate, 3 longer than 4, shorter than 4+5, 4 and 5 subequal, 7–12 decreasing gradually in length (Fig. 87). SN 1–13=AR 8 : 3 : 9 : 5 : 5 : 5 : 4 : 5 : 4 : 5 : 4 : 4 : 4 : 4 : 7, the apical two segments darker than remainder, segments 4–13 with rhinaria, 13 as long as 11+12. ♂. Antenna 14-segmented, segment 3 the longest, strongly excavated on outer margin, 4 strongly swollen, narrow at base, 5–13 not swollen, SN 1–5=AR 5 : 3 : 9 : 5 : 5 : 5 : 5 : 5. Head viewed frontally with eyes as far apart as the height of an eye, frontal carina extending from outer margin of antenna to lateral ocellus, enclosing a strongly reticulated area between median ocellus and antennal sockets. Occiput strongly striate with a strong occipital carina. Pronotum with weak strigose sculpture, pubescent on sides, angled apically with a small indistinct plate on front margin; no tooth medially. Mesoscutum reticulate-coriaceous with fine evenly spaced white pubescence and transverse rugae, notaulices complete, but broken by crenulations, anterior parallel lines indicated, median scutal furrow obsolete. Scutellum viewed laterally with pointed apex, viewed dorsally with apical depression, scutellar fovea elongate, shallow, extending past middle of scutellum, foveae separated by a septum, each fovea polished, carinae of propodeum almost parallel; mesopleurae smooth and polished, suture indicated. Segment 1 of gaster petiolate, three times as long as wide, smooth; segment 2 of gaster liguliform, segment 3 the largest viewed laterally, closely punctate in lateral and dorsal views. Hind tibia with longitudinal furrows and distinctive subrect spines on outer margins. Colour: ♀, head, pronotum, scutellum, antenna and legs reddish, mesoscutum blackish brown, gaster chestnut-brown-red; ♂, antenna, legs orange-yellow, head and thorax black, gaster chestnut-brown-red. Forewings with only sparse hair fringe on lower apical margin, surface of wing with scattered pubescence on apical half, middle with dotted hair bases, Rs_2 extends along margin of wing for a short way without touching margin, vein R_1 not present, $Sc+R$ not distinctly angled at the point where R_1 would normally emanate (Fig. 86).

MATERIAL EXAMINED

Anacharoides striaticeps Cameron, holotype ♀, South Africa: Pearston (*Robert Brown*) (BMNH) [right antenna, left midleg, one fore and hind leg on right side, wings on left side missing]. *Anacharoides gibbosus* Benoit, holotype ♀, Zaire: Rutshuruji, i.1937 (*J. Ghesquiere*) (MRAC, Tervuren).

Angola: 1 ♀, 7 miles [11 km] W. Gabela, 16–18.iii.1972 (BMNH). Nigeria: 1 ♀, Ile-Ife, W. State, x.1973 (*J. T. Medler*). South Africa: 1 ♀, Cape Province, Somerset East, x.1930 (*R. E. Turner*) (BMNH); 2 ♀, Port St Johns, Pondoland, 1–4.v.1923 (*R. E. Turner*) (BMNH). Uganda: 1 ♀, Budongo Forest, 7.ii.1935 (*F. W. Edwards*) (BMNH); 3 ♀, Kazhara, iii.1939 (*T. H. Taylor*) (BMNH); 1 ♀, ? Ruzumbira, c. 1939 (*R. E. Turner*) (BMNH). Zaire: 1 ♂ (allotype of *gibbosus*), same data as holotype except 15.vi.1937 (MRAC, Tervuren); 1 ♀ (paratype of *gibbosus*), same data as holotype (MRAC, Tervuren); 1 ♀, Massif Ruwenzori, Kiurama, 2100 m, 26.x.1953 (*P. Vanschuytbroeck & V. Hendricx*) (MRAC, Tervuren); 1 ♀, Secteur Nord, Mulingo, 1300 m, Secteur Kikura, 9.vii.1954 (*P. Vanschuytbroeck & H. Synave*) (MRAC Tervuren).

Anacharoides stygius Benoit

(Figs 64, 65, 66)

Anacharoides stygius Benoit, 1956 : 197–198. Holotype ♀, ZAIRE (MRAC, Tervuren) [examined].

DESCRIPTION. ♀. Antenna 13-segmented, moniliform, weakly clavate, segment 3 1.5 times length of 4, 4 and 5 equal, 13 larger than 11+12. SN 1–13=AR 5 : 3 : 11 : 5 : 6 : 5 : 6 : 6 : 5 : 5 : 4 : 4 : 4 : 4 : 9. Head viewed frontally with eyes slightly further apart than height of an eye, frontal carina extending from outer margin of antenna to lateral ocellus, enclosing a strongly reticulated area between median ocelli and antennal sockets; occiput strongly striate with pronounced genal carinae. Pronotum with strong striate strigose sculpture, angled apically with a small indistinct plate on front margin; mesoscutum with fine reticulate sculpture and widely spaced transverse rugose sculpture, notaulices complete, distinct anterior parallel lines indicated, median scutal furrow extending to middle of mesoscutum. Scutellum in lateral view pointed at apex, viewed dorsally with apical depression, scutellar fovea extending past middle of

scutellum, separated by a narrow septum with small margined triangular area in front of apical depression (Fig. 64), sides of scutellum strongly reticulate. Mesopleurae smooth and polished, propodeum with parallel carinae converging and joining at either end. Segment 1 of gaster petiolate, longer than wide, smooth, segment 2 of gaster liguliform, segment 3 the largest, apical two-thirds dorsally and laterally closely and finely punctate, punctures extending to remaining visible tergites. Hind tibia with longitudinal furrows and widely spaced spines on outer margins (cf. Fig. 46). Colour: antenna, head and mesopleurae reddish yellow, thorax blackish, gaster and legs chestnut-red-brown, hind coxa swollen, strongly coriaceous with a polished shiny area on inner margins. Forewing with ciliate surface on apical half and scattered hair bases; hair fringe on apical margin short, vein Rs_2 thick, reaching wing margin, R_1 absent $Rs+M$ and M not indicated (Fig. 65), $Sc+R$ angled at point where R_1 would emanate.

♂ unknown.

MATERIAL EXAMINED

Holotype ♀, Zaire: Kuniata-Zobe, end xii.1915 (*R. Mayne*) (MRAC, Tervuren).

Madagascar: 1 ♀, Bekily, iv.1942 (*A. Seyrig*) (MRAC, Tervuren); 1 ♀, Bekily, vii.1940 (*A. Seyrig*) (MNHN, Paris). Nigeria: 2 ♀, Ile-Ife, W. State, v. and x.1973 (*J. T. Medler*) (BMNH). Tanzania: 2 ♀, Kilimanjaro Marangu, 13–20.vii.1957 (*P. Basilewsky & N. Leleup*) (MRAC, Tervuren). Zaire: P. N. A. Secteur Tshiaberimu, Kirungu (lieu-dit) 2720 m, 28.iii.1954 (*P. Vanschuytbroeck & H. Synave*) (MRAC, Tervuren).

Anacharoides suspensus sp. n.

(Figs 61, 68, 79, 82, 83)

DESCRIPTION. ♀. Antenna 13-segmented, elongate moniliform, segment 3 longer than 4, shorter than $4+5$, 4–12 gradually decreasing in length, apical segment equal in length to 3. SN 3–13 = AR 12 : 9 : 8 : 8 : 7 : 7 : 6 : 6 : 6 : 6 : 12. Head viewed frontally with frontal carina extending from outer margin of antenna to lateral margin of eye, face densely pubescent, obscuring the sculptured surface, mandibles with three teeth; vertex incised with frontal carina continued between lateral ocelli, eyes as far apart as height of an eye. Pronotum with a small median dorsal tooth obliquely angled on side margins with a small pronotal-type plate centrally. Mesoscutum with close transverse rugae and scattered pubescence, notaulices complete and crenulate, median scutal line distinct from posterior to middle, obscured anteriorly, triangular at posterior (Fig. 61), anterior parallel lines obsolete. Scutellum viewed laterally with apex pointed, viewed dorsally with apical depression, the basal margin straight, scutellar foveae not extending past middle of scutellum, angled at apex to form a triangular area, lateral bars with fine broken striate sculpture, apex of apical depression viewed dorsally, straight, posteriorly excavate. Mesopleura smooth and polished, episternum pubescent, carinae of propodeum weakly bowed on inner margins. Segment 1 of gaster petiolate, smooth dorsally, weakly furrowed laterally, segment 2 liguliform, segment 3 the largest, closely punctate on lateral and dorsal surfaces, the visible part of segment 4 punctate. Hind tibia with longitudinal furrows, closely pubescent on inner margin with long scattered spines on outer margin, basitarsi as long as remaining tarsal segments. Hind coxae strongly swollen viewed laterally, with polished excavation on inner margins, remainder of surface densely pubescent, inner margins with comb-like hair fringe (Fig. 83). Colour: ♀, antenna entirely orange-yellow, head orange-yellow, pronotum reddish orange, mesonotum reddish suffused with black on outer margins, gaster chestnut-red, legs reddish orange; ♂, same colour as ♀, antenna 14-segmented, segment 3 distally expanded (Fig. 79), 4–14 moniliform. Forewings dotted with short hair bases, apical hair fringe short, radial cell open on front and basally, vein Rs not reaching margin, not extending along wing margin, veins $Rs+M$ not indicated, vein R_1 absent, $2rm$ distinct.

MATERIAL EXAMINED

Holotype ♀, Senegal: Bambey, ex *Ischiodon aegypticum* (*J. Risbec*) (BMNH).

Paratypes. Nigeria: 1 ♀, Zaria, Samaru, 19.ix.1973 (*B. Yashim*) (BMNH). Senegal: 1 ♂, same data as holotype (BMNH).

REMARKS. The male has similar antenna to the female of *decellius* but differs by the sculpture of the mesoscutum. The female has affinities with those species bearing a quadrate scutellar depression.

PROSASPICERA Kieffer

Prosaspicera Kieffer, 1907 : 157. Type-species: *Prosaspicera ensifera* Kieffer, by subsequent designation (Rohwer & Fagan, 1907).

DIAGNOSIS. ♀ antenna 13-segmented, filiform, ♂ 14-segmented with a modified segment 3. Head viewed frontally, coriaceous, inner margins of eye with a carina extending from lateral ocellus to the occiput, vertex incised. Pronotum viewed dorsally raised in the form of a lip, mesoscutum reticulate to coriaceous, median scutal line, anterior parallel lines and notaulices present; scutellar foveae distinct, apical spine of scutellum long and sharply pointed at apex, in dorsal view extending back to base of radial cell. Segment 1 of gaster short, wider than long, weakly furrowed, segment 2 of gaster liguliform, spherical viewed laterally, segment 3 the largest, punctate, almost reaching apex of gaster. Hind tibia longitudinally furrowed on inner margins. Forewings hyaline, usually bare, sometimes with apical hair fringe, radial cell open on front margin, generally open at base.

DISTRIBUTION. Belize; Brazil; Chile; Formosa; Malawi; U.S.A.

DISCUSSION. The type-species of this genus is extra-limital and the generic description is based on the original description by Kieffer, examination of a syntype (labelled paratype), a ♀ No. 26017 in the United States National Museum, Washington, and on the Ethiopian species of *Prosaspicera* discussed in this paper. I have been unable to see the syntypes housed at Pomona referred to by Weld (1952). One other specimen labelled '*Prosaspicera ensifera* K. det. Weld 1934' with the locality 'Mex 215H collection C. F. Baker' has been examined.

Key to Ethiopian species of *Prosaspicera* Kieffer

Females (unknown in *tropica*)

- 1 Antenna weakly subclavate, segment 3 longer than 4 (Figs 49, 100). Wing margin with complete hair fringe 2
- Antenna filiform (Figs 50, 94, 99), segment 3 at most as long as 4. Wing margin with hair fringe either present or absent 3
- 2 Notaulices very wide at apex with wide-spaced transverse carina on a reticulate base, median scutal line forked near apex to form a polished horseshoe-shaped area, lateral bars of scutellum reticulate, merging into lateral lines of scutellum. Scutellar foveae deep, very finely reticulate, separated by a shallow septum. Base of scutellar spine with three carinae merging into a striate medial area (Fig. 51). Radial cell of forewing with R_1 distinctly longer than wide, R_2 curved, extended along wing margin (Fig. 41). Mesopleurae polished on upper half, mesopleural suture obscured by strigose sculpture on lower half (Fig. 52).
 - Apical segment of antenna longer than segment 11+12 *antennata* (Benoit) (p. 107)
 - Notaulices wide with closely spaced transverse carina, median scutal line forked near apex to form a polished triangular area, lateral bars of scutellum reticulate at base, merging into lateral margins of scutellum, scutellar foveae deep, reticulate-coriaceous, separated by a broad septum. Base of scutellar spine broad with longitudinal carinae extending two-thirds of its total length. Radial cell of forewing with R_1 short, not longer than wide, R_2 straight, not projecting along wide margin (Fig. 53). Mesopleurae sculptured on the lower half, coriaceous on upper half *paragicida* (Benoit) (p. 108)
 - 3 Gena viewed laterally reticulate-coriaceous, expanded (Fig. 54); upper facial area between the frontal carinae reticulate-coriaceous (Fig. 54). Median scutal line dividing medially to form a horseshoe-shaped area apically, notaulices not crenulate (Fig. 55). Scutellar foveae polished, scutellar spine narrow basally (Fig. 55).
 - Forewing without apical hair fringe. Apical segment of antenna as long as segment 11+12 *optimus* sp. n. (p. 108)
 - Gena viewed laterally not expanded. Median scutal line dividing medially to form an angular shaped area apically (Fig. 47); notaulices complete, crenulate, foveae sculptured 4
 - 4 Frontal area between median ocellus and antennal sockets weakly strigose, becoming finely reticulate-rugose, eyes viewed frontally strongly swollen closer together than height of an eye measured at the median (Fig. 57), face with strong triangular depression covered in dense white pubescence extending up between antennal sockets, vertex sharply incised
 - kisantua* (Benoit) (p. 107)
 - Frontal area between median ocellus and antennal sockets strongly strigose, eyes viewed frontally not strongly swollen, as far apart as height of an eye (Fig. 56), face with weak depression below median ocellus, weakly pubescent, vertex not sharply incised *africana* Kinsey (p. 106)

Males (unknown in *antennata* and *optivus*)

This key should be treated with caution as only a single male is known of each species.

- 1 Median scutal line with triangular depression at apex dull and coriaceous. Scutellar foveae each with a central longitudinal carina continued together with median carinae separating the foveae down the scutellar spine. Upper face with strong radiating striae extending to antennal scrobes (Fig. 58) *tropica* (Kieffer) (p. 109)
- Median scutal line with depression at apex either polished and triangular or arcuate basally and coriaceous. Scutellar foveae smooth and polished or coriaceous-reticulate, with a central carina in each, not continued along scutellar spine. Upper face coriaceous, rugose or at most with broken striae not extending to antennal scrobes 2
- 2 Apical depression of median scutal line polished with aberrant sculpture. Outer orbits of face with radiating striae, median area reticulate 3
- Apical depression of median scutal line dull with fine sculpture. Outer orbits of face with faint broken striae merging into coriaceous sculpture.
 - Scutellar foveae deep, surface reticulate-coriaceous, scutellar spine with three distinct carinae extending two-thirds of way along the spine from apex of scutellar foveae. Spine completely black *paragicida* (Benoit) (p. 108)
- 3 Upper face strongly rugose. Median scutal line with apical depression arcuate basally, weakly coriaceous on a shiny surface (Fig. 47). Scutellar foveae weakly striated on a polished reticulate surface. Notaulices weakly crenulate. Scutellar spine completely black *africana* (Kinsey) (p. 106)
- Upper face with broken striae. Median scutal line with apical depression triangular, basally deep and shiny, notaulices with strong crenulations. Scutellar spine chestnut-brown *kisantua* (Benoit) (p. 107)

Prosaspicera africana (Kinsey) comb. n.

(Figs 47, 56, 94, 95, 101)

Aspicera africana Kinsey, 1919 : 162-163. LECTOTYPE ♀, SOUTH AFRICA (KSM, Kansas), here designated [examined].

DESCRIPTION. ♀. Antenna filiform, segments 3-6 subequal in length, 7-12 gradually decreasing in length, segment 13 longer than 12, rhinaria present on segments 3-13. SN 3-13=AR 32 : 32 : 31 : 31 : 25 : 25 : 25 : 25 : 25 : 52. ♂. Antenna 14-segmented, moniliform (9 segments only left on the paralectotype), segment 3 excavate at base (Fig. 101). Head with face viewed frontally, coriaceous, eyes as far apart as height of an eye, frons raised, inner margins of eye with a carina extending forward, head viewed dorsally with distinct carina extending from lateral ocellus to antenna and beyond, upper face irregularly rugose, pubescent, cheeks pubescent, mandibles dark orange-brown, occipital carina distinct, occiput striated; vertex with angular depression (Fig. 95). Sides of pronotum pubescent on a coriaceous surface, front of pronotum viewed dorsally raised in form of a lip, mesoscutum reticulate-coriaceous, median scutal line visible anteriorly in the form of an arcuate depression at posterior, anterior parallel lines raised, extending almost half way to scutellar foveae, notaulices complete, weakly crenulate, wide posteriorly, narrowing anteriorly. Lateral bars of scutellum reticulate-coriaceous, extending past the scutellar fovea, scutellar disc truncate either side of scutellar spine and with hair tufts. Viewed dorsally, scutellar foveae polished, deep with striations, foveae separated by a septum which continues along the scutellar spine, spine of scutellum wide-based with striated dorsal surface, narrowing to a sharp spine (Fig. 47). Mesopleurae polished with a suture and weak strigose sculpture, propodeum and metapleurae pubescent. Segment 1 of gaster short, wider than long viewed laterally, weakly furrowed, segment 2 of gaster liguliform, spherical viewed laterally, segment 3 the longest, almost reaching apex of gaster, punctate on apical two-thirds, remaining segments short, punctate. Hind tibia longitudinally furrowed. Colour: antenna, legs reddish brown, head, thorax and gaster brownish black. Forewing with short apical hair fringe in ♀, present on upper margin only in ♂, apex of wing with sparse scattered hairs, remainder with widely spaced spicules, radial cell distinctly open on front and apex (Rs_2 and R_1 not reaching wing margin), areolet absent.

MATERIAL EXAMINED

Lectotype ♀, Rhodesia: Salisbury, 5050 ft [1515 m], vi.1900 (*F. L. Snow*) (KSM, Kansas).

Rhodesia: 4 ♀, Chishawasha, nr Salisbury, ii.1978 (*A. Watsham*) (BMNH); 1 ♀, Salisbury, 1969 (*A. Watsham*) (BMNH); 1 ♂ (paralectotype), Salisbury, 5050 ft [1515 m], xii.1900 (*F. L. Snow*) (KSN, Kansas).

REMARKS. A second male paralectotype in the Kinsey collection (same data as lectotype except xii. 1900) was not examined.

Prosaspicera antennata (Benoit) comb. n.

(Figs 41, 43, 49, 51, 52, 96)

Aspicera antennata Benoit, 1956 : 202. Holotype ♀, ZAIRE (MRAC, Tervuren) [examined].

DESCRIPTION. ♀. Antenna 13-segmented, subclavate, segment 3 longer than 4, 4 and 5 equal, 6 as long as 3, 7 as long as 4, 8 as long as 4, 9, 10, 11 and 12 shorter than 8, 13 longer than 11 + 12 (Fig. 49), SN 3–13 = AR 14 : 13 : 13 : 14 : 13 : 13 : 11 : 11 : 10 : 10 : 22, 3–13 with rhinaria. Head viewed dorsally with carina extending from outer margin of antenna to lateral ocellus enclosing a fine reticulate area, occipital carinae pronounced, vertex incised, back of head below ocelli with canaliculate sculpture (Fig. 96); mesoscutum with distinct notaulices, wider at apex and crenulate, anterior parallel lines indicated, median scutal line extending to middle of mesoscutum where it widens and joins the scutellum at the scutellar suture, surface finely reticulate. Scutellar spine viewed laterally in same plane as scutellar foveae, extending almost to basalis (Fig. 51). Mesopleura polished medially with lateral striations on lower half; lateral bars of scutellum reticulate at base, becoming striated on side margins, scutellar foveae very finely coriaceous, separated by a narrow septum, surface of disc finely reticulate, base of spine broad, gradually tapering towards apex (Fig. 51), base either side of spine with tufts of pubescence. Mesopleura polished on upper half, strongly strigose on lower half (Fig. 52). Segment 1 of gaster viewed laterally, wider than long, crenulate, segment 2 of gaster liguliform, segment 3 the largest, the apical half dorsally and laterally with dense punctures. Hind tibia with longitudinal furrows. Colour: ♀ antenna with segments 1 and 2 chestnut-brown (ferruginous), 3–13 orange-yellow, head and thorax black, gaster dorsally and upper lateral margins chestnut-brown, apical margins yellowish, legs orange-yellow. Forewings with a colourless apical fringe, surface of wing with spicules except for a few sparse hairs apically, radial cell open at base and apex (Rs_2 and R_1 not reaching wing margin) (Fig. 41), R_1 short, longer than wide, weakly projecting (Fig. 41), areolet absent, $2rm$ in form of a spur, cubitus (M) absent, hair fringe on apical margin short.

♂ unknown.

MATERIAL EXAMINED

Holotype ♀, Zaire: Basoko, xii. 1948 (*P. L. Benoit*) (MRAC, Tervuren).*Prosaspicera kisantua* (Benoit) comb. n.

(Figs 42, 48, 57, 98, 99)

Aspicera kisantua Benoit, 1956 : 203–204. Holotype ♀, ZAIRE (MRAC Tervuren) [examined].

DESCRIPTION. ♀. Antenna 13-segmented, filiform, segments 3–6 equal in length, 7–9 equal in length, each shorter than 3, 10 and 11 each shorter than 9, 12 shorter than 11, 13 longer than 11 + 12. Sn 3–13 = AR 17 : 17 : 17 : 17 : 15 : 15 : 15 : 14 : 14 : 13 : 28, rhinaria present on segments 3–13. ♂ antenna 14-segmented, segment 3 expanded apically, 4–13 moniliform, subequal in length, apical segment longer than penultimate. Head viewed dorsally with distinct frontal carina extending from outer margin of lateral ocellus to antenna, enclosing a finely reticulate area, eyes further apart than height of an eye, occipital carinae distinct, vertex incised, back of head with wide longitudinal furrows (Fig. 98). Pronotum viewed dorsally densely pubescent, angled on side margins with a small protruding pronotal plate; surface of mesoscutum with reticulate-coriaceous sculpture, notaulices complete with strong crenulate sculpture, median scutal line extending from base, diverging at a point midway to enclose a polished area, anterior parallel lines not extending to halfway down mesonotum, lateral bars of scutellum reticulate at base, weakly striate apically. Scutellar foveae shallow with wide-spaced crenulations separated by a septum, scutellar disc with longitudinally strigose sculpture interspaced with reticulations at apex; scutellar spine wide at base, rugose, extending as far as apical margin of tergite two viewed dorsally. Mesopleura smooth and polished anteriorly, with weak striations and coriaceous sculpture basally; sides of propodeum densely pubescent. Segment 1 of gaster wider than long, obscured by tergite 2, tergite 2 liguliform, tergite 3 the largest, strongly punctate on lateral and dorsal surfaces of apical two-thirds. Hind tibia with longitudinal furrows. Colour: antenna and legs reddish yellow, head and thorax black, gaster black with dark chestnut tinge at base and on ventral margins. Forewings with hair fringe present on upper apical margin only, surface of wing dotted with widely spaced spicules, radial cell open on front margin (Rs_2 and R_1 not reaching wing margin), areolet absent, R_1 short and weakly projecting, $2rm$ in form of a spur, cubitus (M) absent (Fig. 42).

MATERIAL EXAMINED

Holotype ♀, **Zaire**: Bas-Congo, Kissantu, 1931 (*R. P. Vanderyst*) (MRAC, Tervuren).

Ghana: 1 ♀, ex syrphid on *Guscidia* (BMNH). **Nigeria**: 1 ♀, Ile-Ife, 2.viii.1969 (*J. T. Medler*) (BMNH).

Sierra Leone: 1 ♂, 1 ♀, Njala, 1931 ex syrphid on groundnuts (*E. Hargreaves*) (BMNH).

Prospicera optivus sp. n.

(Figs 50, 54, 55, 97)

DESCRIPTION. ♀. Antenna 13-segmented, filiform, 3 shorter than 4, 4 and 5 subequal, 6–12 each decreasing very slightly in length, 13 longer than 12. SN 3–13 = AR 17 : 19 : 19 : 16 : 14 : 13.5 : 12.5 : 11 : 10 : 11 : 22, rhinaria present on segments 3–13. Head viewed dorsally with distinct frontal carina extending from outer margin of lateral ocellus to antenna, viewed laterally with reticulate-coriaceous sculpture between occipital carina and margin of eye, genal area wide (Fig. 97), vertex incised, occipital carinae viewed dorso-posteriorly, expanded, vertex with canaliculate sculpture (Fig. 97). Pronotum weakly pubescent on side margins with a small protruding pronotal plate. Surface of mesoscutum with reticulate sculpture, median scutal line dividing medially to form a horseshoe-shaped area, anterior parallel lines short, not extending to middle of mesoscutum, notaulices complete, smooth and polished, lateral bars of scutellum reticulate, merging into margin of the scutellar disc. Scutellar foveae smooth and shiny, with a septum continued along the dorsal surface of the acutely pointed spine, apex of disc truncate, spine at base arising from above the apex of scutellar disc (Fig. 55). Mesopleurae smooth and polished anteriorly, strigose in part basally; sides of propodeum pubescent. Segment 1 of gaster wider than long, obscured by tergite 2, tergite 2 liguliform, tergite 3 the largest viewed laterally, the apical third strongly punctate, remaining segments hardly visible. Hind tibia with longitudinal furrows on inner margins. Colour: antenna and legs reddish yellow, head, mesoscutum, scutellum and apical segments of gaster black, anterior half of mesopleurae and basal segments of gaster reddish. Forewings without apical hair fringe, surface of wing dotted with widely spaced spicules, radial cell open on front margin (R_{5+2} reaching wing margin, R_1 not reaching wing margin), areolet absent, $2rm$ not in form of a spur.

♂ unknown.

MATERIAL EXAMINED

Holotype ♀, **Congo**: Cayo Dist., Central Farm, x.i.1975, on *Zea mays* L. (*R. Akers*) (BMNH).

REMARKS. This species is distinguished from others with a filiform antenna by the very distinctive expanded gena.

Prospicera paragicida (Benoit) comb. n.

(Figs 53, 100, 102)

Aspicera paragicida Benoit, 1956 : 202–203. Holotype ♀, ZAIRE (MRAC, Tervuren) [examined].

DESCRIPTION. ♀. Antenna 13-segmented, weakly clavate, segment 3 longer than 4, 4 and 5 equal, SN 1–13 = AR 20 : 6 : 16 : 13 : 15 : 15 : 13 : 13 : 13 : 13 : 13 : 26, segments 9–12 almost as broad as long (Fig. 100), rhinaria present on 3–13. ♂. Antenna 14-segmented. SN 3–5 = AR 20 : 16 : 17. Segment 3 strongly expanded apically (Fig. 102), rhinaria on segments 3–14. Head viewed dorsally with frontal carina extending from outer margin of antenna to lateral ocellus, not distinct, enclosing a fine reticulate area with radiating sculpture in part, occipital carina distinct, occiput with widely spaced canaliculate sculpture (cf. Fig. 97). Pronotum viewed dorsally, angled on the margins. Mesoscutum with fine reticulate sculptured surface, notaulices distinct, complete, wide at apex and crenulate, lateral lines complete, anterior parallel lines not reaching halfway to apex, median scutal line reaching halfway to apex and branching to enclose a polished wide triangular area. Mesopleurae polished on upper half with fine striate sculpture and a carina (a mesopleural suture) in middle section. Scutellar spine viewed laterally in the same plane as scutellar foveae, strongly ridged; scutellum finely reticulate with longitudinal strigose sculpture continued along spine, scutellar fovea deep, surface reticulate-coriaceous, separated by a weak septum, the apex of scutellum either side of spine pubescent. Segment 1 of gaster viewed laterally wider than long, crenulate, segment 2 of gaster liguliform, segment 3 the largest, the apical two-thirds with dense punctures dorsally and laterally. Hind tibia with longitudinal furrows. Colour: antenna, legs reddish yellow, head, thorax and gaster black, apex of gaster with dark chestnut-brown tinge. Forewing with radial cell open at base and apex (R_{5+2} and R_1 not reaching margin of wing), R_1 short, conical, as wide as long measured at

base, weakly projecting, cubitus (*M*) absent, *Rs*₂ almost straight, venation very pale, surface of wing dotted with spicules on apical half, hair fringe on apical margin short.

MATERIAL EXAMINED

Holotype ♀, **Zaire**: Samkuru, Gandajika, 5.iii.1948 (*P. Henrard*) (MRAC, Tervuren).

Zaire: 2 ♀, 2 ♂, same data as holotype (all parasites of larvae of *Paragus borbonicus* Macquart (Syrphidae) (MRAC, Tervuren).

Prospicera tropica (Kieffer)

(Fig. 58)

Aspicera tropica Kieffer, 1910c : 20. Holotype ♂, MALAWI (MNHU, Berlin) [examined].

Prospicera tropica (Kieffer) Weld, 1952 : 167.

DESCRIPTION. ♂. Antenna 14-segmented. SN 3-5=AR 14 : 13 : 12. Segment 3 swollen medially, 4-13 moniliform, subequal in length, 14 longer than 13. Head viewed frontally arcuate on vertex, inner orbits of face with radiating striae (Fig. 58), face above clypeus densely pubescent, occipital carinae distinct, vertex crenulate (Fig. 58). Pronotum angled on dorsal margin with a coriaceous pronotal plate, sides of pronotum coriaceous and slightly pubescent. Surface of mesocutum coriaceous, median scutal line distinct, in form of a wide deep coriaceous triangular area apically, its side margins bordered by the inner margins of the notaulices, notaulices wide at apex, crenulate, anterior parallel lines pronounced, extending to a point midway on the mesoscutum, lateral lines almost complete; scutellar foveae separated by carinae, each fovea with a longitudinal carina extending to and along the scutellar spine, scutellar spine viewed dorsally reaching as far as margin of segment 3 of gaster viewed dorsally; propodeum carina not obvious. Mesopleural suture distinct, area above and below suture reticulate-coriaceous. Segment 1 of gaster not visible. Segment 2 liguliform, segment 3 the largest, viewed laterally the apical two-thirds strongly punctured, remaining segments not visible. Hind tibia with longitudinal ridges. Radial cell of forewing open at base and on wing margin, vein *m* indicated as a short spur. Colour: head and thorax black, gaster chestnut-brown to black, antenna and legs orange-yellow.

♀ unknown.

MATERIAL EXAMINED

Holotype ♂, **Malawi**: Nyassa-See, Langenburg, vi-vii. 1898 (*S. Füllehorn*) (MNHU, Berlin).

OBERTHUERELLINAE Kieffer

Oberthuerellinae Kieffer, 1903 : 88. Type-genus: *Oberthuerella* Saussure.

Segment 5 of gaster the largest, preceded by three short segments (Fig. 2). Scutellum more usually with a spine on the apical margin. Hind femur with a distinct tooth on the underside (Fig. 11).

DISCUSSION. The Oberthuerellinae was treated as one of three subfamilies in the Liopteridae by Hedicke & Kerrich (1940) and again by Weld (1952). It is closely related to the Mesocynipinae but distinguished from it by a conspicuous tooth or spine on the underside of the hind femur and the scutellum invariably has a distinct medial spine at the apex with a tooth or spine on either side. It is separated from the Liopterinae by the gaster being attached normally at an angle (Fig. 2). The Oberthuerellinae are not known to occur outside the Ethiopian Region and comprise three genera, *Oberthuerella* Saussure, *Tessmannella* Hedicke and the monotypic *Xenocynips* Kieffer. Twelve species of *Oberthuerella*, including two newly described here, are at present recognised. Of the twelve, two are omitted from the key to species either because the syntype-material is lost or the type-depository is not known. Only four species of *Tessmannella* are known, including one described in this paper. Hedicke (1912a) separated *Tessmannella* and *Xenocynips* from *Oberthuerella* on the median dorsal tooth of the pronotum being present in both but completely absent in *Oberthuerella*. *Xenocynips* was erected by Kieffer (1910) and is separated from *Oberthuerella* and *Tessmannella* by segments 2-4 of the gaster being fused.

Key to genera of Oberthuerellinae

- 1 Pronotum without a median dorsal tooth on hind margin; propodeum with pronounced side margins in the form of flaps, strongly sculptured (Fig. 117); tooth on hind femur almost erect (Fig. 111); segment 1 of gaster sulcate, at most twice as long as broad, almost rectangular (Fig. 114) **OBERTHUERELLA** Saussure (p. 110)
- Pronotum viewed laterally with a median dorsal tooth on hind margin anterior of mesoscutum (Fig. 116), propodeum without pronounced side margins (Fig. 115); angle of tooth on hind femur variable; segment 1 of gaster variable in length 2
- 2 Tergites 2, 3 and 4 short, 5 the largest; hind femur with a rounded lobe between medial area and apex, tooth angled, not erect (Fig. 109); segment 1 of gaster at least three times as long as broad, petiolate (Fig. 120); hind tibia with distinct lobe opposite the two tibial spines apically; scutellar foveae three in number **TESSMANNELLA** Hedicke (p. 116)
- Tergites 2-4 fused without trace of suture (Fig. 32); hind femur without a rounded lobe at apex, tooth between medial area and apex erect (Fig. 111); segment 1 of gaster sulcate, less than three times as long as broad, almost rectangular; hind tibia without a distinct lobe apically; scutellar foveae obscure (Fig. 110) **XENOCYNIPS** Kieffer (p. 118)

OBERTHUERELLA Saussure

Oberthuerella Saussure, 1890 : 20, pl. 20. Type-species: *Oberthuerella lenticularis* Saussure, by monotypy.

DIAGNOSIS. ♀ antenna 13-segmented, clavate; ♂ antenna 14-segmented. Face viewed frontally reticulate to rugose with a frontal line or keel extending from anterior ocellus to clypeus in most species, eyes further apart than the height of an eye viewed frontally. Pronotum sculptured without a median tooth on hind margin. Mesoscutum variously sculptured, scutellum apically tridentate the median tooth generally in the form of a long spine except in *triformis*, base of scutellum with a variable number of between 2 and 4 foveae each separated by a longitudinal carina. Segment 1 of gaster (petiole) sulcate, variable in length, segments 2-4 each short, 5 the largest in lateral view. Hind femur with erect tooth.

DISTRIBUTION. Cameroun; Madagascar; Nigeria; Zaire.

DISCUSSION. The original publication contained only the name and a figure. Kieffer (1903 : 88), however, gave an extended description of *lenticularis*. Weld (1952) stated 'that a female in Paris collected by Alluaud in 1901 in Madagascar may be the type of *lenticularis* Sauss'. To this specimen Weld added his determination label 'Oberthuerella lenticularis Sauss. det. Weld 1931'. This specimen cannot be a syntype because Saussure's original figure of *lenticularis* was published in 1890. The specimen determined by Weld agrees in detail with Kieffer's description and with the figure of *lenticularis* illustrated by Saussure (1890). I have examined a specimen standing under *lenticularis* in Geneva labelled 'Typus' and 'Madagasc'; it is a male and therefore cannot be the type figured by Saussure (1890) or the specimen described as *lenticularis* by Kieffer (1903).

Key to species of *Oberthuerella* Saussure

- 1 Frontal line in form of a keel or crest running from median ocellus to clypeus through rugose sculpture; gaster viewed laterally generally with conspicuous hairs on segments 2-5 viewed dorsally with or without long golden pubescence; ♀ with weak apical hair fringe on segments 5 and 6 viewed laterally 2
- Frontal line not present, face entirely reticulate-rugose; gaster viewed dorsally without conspicuous hairs on the segments; ♀ with sparse hairs and apical fringe sometimes present on segments 5-7 8
- 2 Tergites 2-5 of gaster viewed dorsally with dense long golden pubescence. Segment 1 of gaster at least as broad as long (Fig. 119); areolet absent. (♂ unknown) **aureopilosa** Benoit (p. 112)
- Tergites 2-3 of gaster viewed dorsally without pubescence, 4-5 with fine pubescence or bare (Fig. 120); areolet present or absent 3
- 3 Apical margin of tergite 4 of gaster almost straight medially (Fig. 120); segment 1 of gaster longer than broad. 5
- Areolet absent 5
- Apical margin of tergite 4 of gaster strongly arcuate medially (Figs 121, 127), segment 1 of gaster either longer than broad or as broad as long 4

- 4 Segment 5 of gaster viewed dorsally with long scattered pubescence; first cubital cell of forewing closed, areolet distinct though sometimes weakly indicated (Fig. 122) 6
- Segment 5 of gaster viewed dorsally without long scattered pubescence; first cubital of forewing open, areolet absent (Fig. 123) 7
- 5 Pronotum distinctly striated; scutellar spine short, viewed dorsally not extending one-fourth of the length of segment 1 of gaster, segment 5 of gaster viewed laterally shiny with fine scattered punctures, segments 5 and 6 with apical hair fringe; fore and mid legs black, hind coxae dark chestnut, femur and tibia yellow, tarsi reddish black. (δ unknown) *breviscutellaris* Benoit (p. 112)
- Pronotum reticulate-rugose; scutellar spine long, viewed dorsally extending complete length of segment 1 of gaster in male, short in female; segment 5 of gaster viewed laterally closely and densely punctate, dull with long scattered hairs on dorsal surface (Fig. 126); fore, mid and hind legs reddish yellow *longispinosa* Benoit (p. 114)
- 6 Pronotum reticulate-rugose; gaster and legs orange-yellow, segments 5–7 of gaster with fine scattered pubescence on upper lateral surface, lower lateral surface very finely punctate; forewing with areolet very weakly indicated, first cubital cell appearing closed basally (Fig. 122). (δ unknown) *crassicornis* Benoit (p. 112)
- Pronotum punctate-reticulate (the punctures widely spaced); gaster and legs chestnut-brown, segments 5–7 of gaster with long golden scattered pubescence on upper lateral surface, lower lateral surface strongly punctate; forewing with areolet distinct, first cubital cell closed (Fig. 124). (δ unknown) *nigrescens* Benoit (p. 115)
- 7 Frontal line in form of a sharp keel, narrow; segment 3 of antenna shorter than 4 in both sexes; segment 1 of gaster longer than broad, black *abscinda* sp. n. (p. 111)
- Frontal line not sharp, raised and broadened apically, obscured by sculpture; segments 3 and 4 of antenna subequal; segment 1 of gaster as broad as long, chestnut-brown. (δ unknown) *longicaudata* Benoit (p. 114)
- 8 Forewing with a distinct areolet, first cubital cell closed (Fig. 128); scutellar spine long, viewed dorsally extending well past middle of segment 1 of gaster; pronotum and mesoscutum coarsely reticulate rugose; legs entirely yellow *lenticularis* Saussure (p. 113)
- Forewing without an areolet, first cubital cell closed; scutellum tridentate but without a spine medially (Fig. 125); pronotum and mesoscutum aciculate; fore and mid legs reddish black, hind femur and tibia reddish yellow. (δ unknown) *triformis* sp. n. (p. 115)

Oberthuerella abscinda sp. n.

DESCRIPTION. ♀. Antenna 13-segmented, clavate, segment 3 shorter than 4. SN 3–13 = AR 17 : 23 : 18 : 20 : 15 : 17 : 14 : 14 : 12 : 12 : 20, segments 5–13 each progressively thicker than preceding segment.

♂. Antenna 14-segmented, segment 4 twice the length of 3, 5 longer than 3, shorter than 4, remainder subequal to 5. Face viewed frontally reticulate-rugose with a distinct frontal line or keel extending from anterior ocellus to clypeus, eyes further apart than height of an eye, cheeks converging sharply. Pronotum and mesoscutum reticulate-rugose viewed dorsally. Notaulices submerged in coarse reticulate sculpture. Scutellum with 3–4 irregular foveae at base, apical margin tridentate with the median tooth in form of a distinct spine. Propodeum viewed posteriorly, angular, carina of propodeum weakly bowed with transverse canaliculate sculpture either side. Mesopleura with strigose sculpture on a polished surface. Segment 1 of gaster sulcate, longer than broad, gaster viewed dorsally without pubescence, segment 4 of gaster arcuate medially; hypopygium protruding, ventral spine short. Legs black, hind femur with erect spine between middle and apex, punctate; hind tibia foveolate-reticulate on outer margins, inner margins with longitudinal carinae. Wings infusate, densely ciliate on the surface, margins bare, radial cell of forewing closed, first cubital cell open, second cubital cell absent (areolet), cubitus almost reaching apex of wing. Colour: antenna, head, segment 1 of gaster (petiole) and legs black; gaster yellow.

MATERIAL EXAMINED

Holotype ♀, Zambia: Mbala ('Abercorn'), 31.xii.1943 (BMNH).

Paratypes. Zambia: 1 ♂, same data as holotype (BMNH). Zaire: Eala, xii.1932 (*A. Corbiser*) (MRAC, Tervuren).

REMARKS. This species is in the group with a frontal line present on the face but lacks long scattered pubescence on the gaster. Segment 3 of the antenna is shorter than 4 in both sexes, thus separating it from *longicaudata*.

Oberthuerella aureopilosa Benoit

(Fig. 119)

Oberthuerella aureopilosa Benoit, 1955 : 290. Holotype ♀, ZAIRE (MRAC, Tervuren) [examined].

DESCRIPTION. ♀. Antennae 13-segmented (only basal three segments of type present, five median segments mounted on card point). Face viewed frontally with a pronounced median carina, extending to median ocellus, surface reticulate-rugose with fine pubescence, cheeks not sharply converging. Pronotum and mesoscutum with broken transverse reticulate-rugose sculpture, median scutal line complete and distinct, notaulices distinct. Scutellum coarsely reticulate-rugose with long apical spine medially, lateral bars extended at apex to form short spines, scutellar foveae canaliculate. Propodeum angular viewed from behind, sculpture obscured by dense pubescence; mesopleura with strigose sculpture on upper half, polished on lower half. Segment 1 of gaster viewed dorsally slightly broader than long, crenulate, gastral segments 2–5 on dorsal surface with long golden pubescence on a foveolate-reticulate surface, viewed laterally apical half of segment 5 pubescent, remaining visible segment pubescent, hypopygium not protruding, apical sternite produced, apical margin with long setae, ventral spine short. Legs dark chestnut-red, tarsi black, hind femur with perpendicular spine between middle and apex, hind tibia polished, with widely spaced foveolae, inner side with a longitudinal carinae. Wings infusate, densely ciliate on surface, margins bare, radial cell of forewing closed, first cubital cell closed, 2nd cubital (areolet) not indicated, cubitus almost reaching apex of wing. Colour: antenna, head, thorax, segment 1 of gaster with black and brown crenulations, gaster orange-red.

♂ unknown.

MATERIAL EXAMINED

Holotype ♀, Zaire: Maniema, Kindu, xi.1973 (*L. Burgeon*) (MRAC, Tervuren).*Oberthuerella breviscutellaris* Benoit

(Fig. 120)

Oberthuerella breviscutellaris Benoit, 1955 : 286. Holotype ♀, ZAIRE (MRAC, Tervuren) [examined].

DESCRIPTION. ♀. Antennae 13-segmented, subclavate, segment 3 shorter than 4, 4 shorter than 5, 6 shorter than 5, subequal to 7, 8–13 subequal in length, 8–12 as wide as long, 13 longer than wide. SN 3–13 = AR 10 : 12 : 15 : 12 : 11 : 10 : 8 : 8 : 8 : 8 : 14. Face viewed frontally with coarse reticulate sculpture, striate in region of clypeus and cheeks, median area in form of a crest viewed laterally, eyes further apart than height of an eye, cheeks converging sharply. Pronotum transversely striate dorsally. Mesoscutum with coarse transverse ridge-like sculpture, notaulices crenulated, impressed, median scutal line absent. Scutellum with foveae at base (obscured in the holotype by the pin on which it is mounted being through the centre), sculpture large reticulate-rugose, apex of scutellum with medial spine spoon-shaped and lateral bars tooth-shaped apically. Propodeum viewed dorsally, foveolate. Mesopleura with diagonal striate sculpture, mesopleural triangle finely coriaceous. Segment 1 of gaster sulcate, longer than broad viewed dorsally (length 3.5, breadth 2.5) but broader apically than at base (Fig. 120). Tergites 2–4 short, tergite 4 of gaster as long as 3+4 (Fig. 120), 5 the longest, all segments with sparse punctures visible on the dorso-lateral margins, apex of 5, 6 and 7 with long setae, hypopygium distinct. Coxae and tibiae smooth and shining, tarsi dull, sculptured and pubescent, hind metatarsus longer than remaining segments combined, hind femur with distinct perpendicular tooth or spine. Wings entirely fuscous, forewing with radial cell completely closed, radial and first cubital cell darker, first cubital open, second cubital (areolet) not indicated, wing surface lightly ciliate, margins bare, cubitus almost reaching apex of wing. Colour: antenna, head, thorax, fore and mid legs black, hind coxae black, femur, tibiae and tarsi red, segment 1 of gaster black, remaining segments yellowish orange.

MATERIAL EXAMINED

Holotype ♀, Zaire: Luala, Luashi, x.1938 (*F. Freyne*) (MRAC, Tervuren).Rhodesia: 1 ♀, Mt Chirinda, Gasaland (*Marshall*) (BMNH). Zaire: 1 ♀, Lubumbashi, 1.iii.1975 (*W. Beun*) (MRAC, Tervuren).*Oberthuerella crassicornis* Benoit

(Figs 121, 122, 127)

Oberthuerella crassicornis Benoit, 1955 : 289. Holotype ♀, ZAIRE (MRAC, Tervuren) [examined].*Oberthuerella compressa* Benoit, 1955 : 292. Holotype ♀, ZAIRE (MRAC, Tervuren) [examined]. **Syn. n.**

DESCRIPTION. ♀. Antenna 13-segmented, clavate. SN 3–13=AR 12:15:12:12:12:10:10:10:10:10:23, 5–12 each progressively thicker. Face viewed frontally reticulate-rugose, with a distinct frontal line or keel extending from median ocellus to clypeus, eyes further apart than height of an eye, strongly swollen in frontal view, cheeks converging, pronotum and mesoscutum foveolate to reticulate-rugose viewed dorsally, notaulices present, impressed in the sculpture, base of scutellum with three large foveae, median area reticulate-rugose, apex of scutellum tridentate, the medial spine viewed dorsally as long as segment 1 of gaster (petiole). Mesopleurae transversely strigose to rugose-foveolate anteriorly. Propodeum with parallel carinae and a transverse medial ridge. Segment 1 of gaster sulcate, viewed dorsally longer than wide, segment 2 of gaster viewed dorsally shorter than 1, 3 subequal to 2 (Fig. 127); apical margins straight medially, segment 4 longer measured medially than 2+3, apical margin arcuate, segment 5 the largest with scattered pubescence and strongly punctate in lateral view, apical margin of tergite 6 with a fringe of hairs, hypopygium short, not protruding. Legs orange-yellow, smooth and shining. Hind femur with suberect median spine; hind tibia weakly sculptured. Wing surface ciliate, margins bare, radial cell of forewing completely closed, cubitus extending almost to edge of wing, first cubital cell closed, areolet weakly indicated. Colour: antenna, head and thorax black, petiole black and red, gaster orange-red.

♂ unknown.

MATERIAL EXAMINED

Oberthuerella crassicornis Benoit, holotype ♀, **Zaire**: Tshuapa, Eala, vii. 1936 (*J. Ghesquière*) (MRAC, Tervuren). *Oberthuerella compressa* Benoit, holotype ♀, **Zaire**: dist. Lac Léopold II, Bena Bendi, v.1915 (*R. Mayne*) (MRAC, Tervuren).

Malawi: 1 ♀, Malanje, 24.iv.13 (*S. A. Neave*) (BMNH).

Oberthuerella lenticularis Saussure

(Figs 114, 117)

Oberthuerella lenticularis Saussure, 1890: pl. 20. Holotype ♀, **MADAGASCAR**: (? MHN, Geneva). (Holotype not found; description based on material determined by Weld, 1931.).

DESCRIPTION. ♀. Antenna 13-segmented, subclavate, segment 3 shorter than 4, 5–12 cylindrical, longer than broad, 13 subequal to 11+12. SN 3–13=AR 17:21:22:20:18:15:12:12:12:12:20. ♂. Antenna 14-segmented. SN 3–14=AR 10:17:15:15:15:13:13:13:13:13:13:20. Head viewed frontally with a median ridge extending from median ocellus to a point midway between antennal sockets, face and dorsal surface of head coarsely reticulate-rugose with scattered pubescence, face without a medial carina. Pronotum and mesoscutum shining, coarsely reticulate, median scutal line and notaulices obscure, impressed in the sculpture, centre of scutellum dished with longitudinal carina within each of two foveae, apex of scutellum reticulate-rugose, ending in a smooth spine almost as long as breadth of scutellum, lateral bars extending at apex to form short spines. Propodeum angled either side of centre which is broad and crenulate (Fig. 117). Mesopleurae with strigose-reticulate sculpture on upper half, polished on lower half. Segment 1 of gaster viewed laterally as broad as long, crenulate (Fig. 114), segment 2 viewed dorsally short, 3 twice as long as 2, 4 as long as wide, 5 the longest, viewed laterally apex of tergite 4 with scattered setae, apex of 5 and 6 finely reticulate, hypopygium not protruding, ventral spine short. Petiole in ♂ longer than broad, segments 2 and 3 of gaster viewed dorsally of equal length, 4 twice length of 3. Legs orange-yellow, coxae and femur shiny, hind femur with distinct perpendicular tooth. Wings infusate, darker basally, surface finely ciliate, margins bare, radial cell of forewing completely closed, first cubital cell closed, second cubital (areolet) weakly indicated, cubitus almost reaching apical margin of wing (Fig. 128). Colour: antenna, head and thorax black, petiole and gaster orange-red.

MATERIAL EXAMINED

Madagascar: 1 ♀, Region du Sudest, Vallée du Fanjahira Isakam, xii.1901 (*Ch. Alluaud*) (MNHN, Paris); 1 ♀, 1 ♂, 1919 (*J. de Gaulle*) (MNHN, Paris); 1 ♀, ? Somlirano (*A. Seyrig*) (MNHN, Paris); 2 ♀, Fanovano, iii.34 (*A. Seyrig*) (MNHN, Paris); 1 ♀, Manara, x.1963 (*J. Vadon*) (MRAC, Tervuren); 1 ♀, Manguzi River, nr Maputa Z., xii.1945 (*H. Bell Marley*) (BMNH); 1 ♀, Ambodivoangy, xii.1961 (*J. Vadon*) (MRAC, Tervuren); 1 ♀, Fanpanambo, ii.1960 (*J. Vadon*) (MRAC, Tervuren); 1 ♀, same data except ii.1961 (MRAC, Tervuren); 1 ♀, Manara, 1963 (*J. Vadon*) (MRAC, Tervuren); ♀, Bekily, Reg. Sud De Lile, iii.1933 (*A. Seyrig*) (MNHN, Paris). **Malawi** (Nyasaland): Chiromo (*R. C. Wood*) (BMNH). **South Africa**: 1 ♀, Natal, Lake Sibayi, 13–24.iii.1968 (*D. J. Brothers*) (AM, Grahamstown).

Oberthuerella longicaudata Benoit

(Fig. 123)

Oberthuerella longicaudata Benoit, 1955 : 291. Holotype ♀, ZAIRE (MRAC, Tervuren) [examined].

DESCRIPTION. ♀. Antenna 13-segmented (apical three segments missing), subclavate, segments 3 and 4 subequal, 5 longer than 4, remaining segments gradually decreasing in length. SN 3-10=AR 20 : 20 : 22 : 19 : 18 : 18 : 18 : 18. Face with reticulate-rugose sculpture and fine scattered pubescence, medial carina extending to median ocellus. Pronotum viewed dorsally foveolate, mesoscutum with transversely wrinkled reticulate-rugose surface, notaulices distinct but submerged in the surface sculpture. Scutellum coarsely foveolate with five canaliculate foveae at base, median apical spine short, equal to apical width of scutellum, lateral bars produced to form weak spines on either side of medial spine. Propodeum angular on side margins, weakly pubescent, carinae bowed with foveolae within medial area. Mesopleurae with transversely striate sculpture on upper half, lower half polished. Segment 1 of gaster viewed dorsally broader than long, crenulate, segment 2 slightly shorter than 3, 3 longer than 2, 4 longer than 3, viewed laterally finely punctate, apical margins of 4, 5 and 6 with fringe of hairs, hypopygium short, not protruding, ventral spine short. Legs orange, hind femur with distinct perpendicular tooth, hind tibiae polished with widely spaced foveolae medially, hair fringe on margins weak. Wings infusate, surface ciliate, margins bare, radial cell of forewing closed, first cubital cell open, second cubital (areolet) not indicated, cubitus almost reaching apex of wing. Colour: antenna, head and thorax black, segment 1 of gaster mainly black, apex reddish, gaster orange-red.

♂ unknown.

MATERIAL EXAMINED

Holotype ♀, Zaire: Tshupa, Eala, v.1935 (*J. Ghesquière*) (MRAC, Tervuren).*Oberthuerella longispinosa* Benoit

(Fig. 126)

Oberthuerella longispinosa Benoit, 1955 : 290. Holotype ♂, ZAIRE: (MRAC, Tervuren) [examined].

DESCRIPTION. ♀. Antenna 13-segmented. SN 3-13=AR 10 : 11 : 14 : 13 : 12 : 10 : 10 : 10 : 8 : 8 : 13. ♂. Antenna 14-segmented, subclavate, segment 3 shorter than 4, 4 longer than 5, 5 and 6 subequal, 7-13 subequal, each shorter than 6, 14 shorter than 12+13. SN 3-14=AR 13 : 20 : 18 : 18 : 16 : 16 : 16 : 15 : 15 : 15 : 26. Face with median carina extending to median ocellus, surface rugose-reticulate with fine sparse pubescence and strigose sculpture medially. Pronotum and mesoscutum coarsely reticulate-rugose, median scutal line obsolete, visible apically, notaulices submerged in surface sculpture but distinct. Scutellum coarsely reticulate-rugose with median apical spine as long as apical width of scutellum, lateral bars in form of spines at apex, scutellar foveae canaliculate, five in number. Propodeum angular viewed from behind, carinae parallel on sculptured surface, pubescent on side margins only. Mesopleura with canaliculate sculpture on upper surface, polished below. Segment 1 of gaster longer than broad, sulcate, segment 2 viewed dorsally shorter than 3, 3 shorter than 4, 5 largest with long scattered hairs, viewed laterally segment 5 with fine dense punctures. Legs completely orange-red, hind femur with distinct perpendicular tooth, hind tibia coarsely reticulate and pubescent on the outer margins, inner side with a longitudinal carina. Wings infusate, surface ciliate, margins bare, radial cell of forewing completely closed, first cubital cell appearing open (venation not indicated), second cubital (areolet) absent, cubitus extending past middle of wing. Colour: antenna, head and thorax black, segment 1 of gaster chestnut-red, remaining segments orange-red.

MATERIAL EXAMINED

Holotype ♂, Zaire: Iles des Elephants (en aval de Roma), 30.xi.1939 (*H. J. Bredo*) (MRAC, Tervuren).

Gabon: 1 ♀, 'Congo Franc', Ogooue N'kogo, 1901 (*J. Bouysson*) (MNHN, Paris); 1 ♀, Ogooue, Lambarene, 1912 (*R. Ellenberger*) (MRAC, Tervuren). Ivory Coast: 1 ♀, Andé Bongouuno, iii.1962 (*J. Decelle*) (MRAC, Tervuren). Malawi: 1 ♀, Ruo Valley, 2000 ft [600 m], 14.xii.1913 (*S. A. Neave*) (BMNH).

Oberthuerella nigra Kieffer*Oberthuerella nigra* Kieffer, 1910 : 110. Holotype ♂, EQUATORIAL GUINEA ('Spanish Guinea') (originally in MNHU, Berlin, now missing).

I have not included this species in the key as the taxonomic characters used by Weld (1952) and Benoit (1955) are based on colour only. Neither author appears to have seen the type-material, which is now missing.

Oberthuerella nigrescens Benoit

(Fig. 124)

Oberthuerella nigrescens Benoit, 1955 : 288. Holotype ♀, ZAIRE (MRAC, Tervuren) [examined].

DESCRIPTION. ♀. Antennae 13-segmented, subclavate, SN 1-13=AR 22 : 7 : 25 : 26 : 24 : 20 : 17 : 17 : 16 : 16 : 14 : 13 : 20. Face viewed frontally coarsely reticulate-rugose with fine scattered pubescence, median carina extending to median ocellus, eyes viewed frontally further apart than the height of an eye, cheeks weakly converging, head viewed dorsally reticulate-rugose either side of lateral ocelli, weak striae medially. Pronotum dorsally scaly-reticulate with interspaces as big as the reticulate areas. Mesoscutum coarsely reticulate-rugose, median scutal line obsolete, notaulices distinct though submerged in surface sculpture of mesoscutum. Scutellum with canaliculate foveae at base, apex of scutellum with a distinct medial spine as long as apical width of scutellum, smooth and polished, medial area of scutellum coarsely reticulate-rugose, lateral bars of scutellum produced apically to form weak spines either side of median spine. Propodeum with distinct carinae medially and wide flanged-shaped areas on either side. Mesopleurae with reticulate-rugose sculpture in upper half, lower half mainly polished with broken reticulate outer margins. Segment 1 of gaster viewed dorsally slightly longer than broad, sulcate, segment 2 viewed dorsally one-third as long as segment 3, 3 half as long as 4, apical margin of segment 2 reflexed inward, side margins of tergites 2 and 3 with fine short scattered pubescence, tergite 5 the largest viewed laterally with fine scattered punctures in median basal area, long scattered pubescence anteriorly on apical region and dense small punctures in basal apical area, tergites 5 and 6 densely punctate with scattered long hairs, hypopygium short, not protruding, ventral spine short. Hind femur with a suberect median tooth or spine, hind femur coarsely foveolate-reticulate with comb of hairs on margin and a distinct longitudinal carina medially on inner side. Wings infusate, surface ciliate, margin of wing bare, radial cell of forewing completely closed, cubitus almost reaching apex of wing, first cubital cell closed, second cubital (areolet) complete, closed (Fig. 124). Colour: antenna, head, thorax and segment 1 of gaster (petiole) black, remaining segments dark chestnut-brown, legs dark brown.

♂ unknown.

MATERIAL EXAMINED

Holotype ♀, Zaire: Tshuapa, Eala, ix.1935 (*J. Ghesquière*) (MRAC, Tervuren).

Oberthuerella tibialis Kieffer

Oberthuerella tibialis Kieffer, 1904 : 107. Holotype ♀, CAMEROUN (? depository) [not examined].

The whereabouts of the holotype of this species is not known. Benoit (1955) includes it in his key but gives no indication as to whether he examined the type-material.

Oberthuerella triformis sp. n.

(Fig. 125)

DESCRIPTION. ♀. Antenna 13-segmented, subclavate, SN 3-13=AR 15 : 15 : 20 : 15 : 12 : 12 : 10 : 8 : 8 : 10, segments 5-13 each very slightly broader than preceding one, segment 5 the largest. Face viewed frontally transversely strigose medially, reticulate-rugose laterally, frontal line or keel not apparent, eyes further apart than the height of an eye, cheeks weakly converging. Pronotum and mesoscutum transversely aciculate, notaulices submerged in the transverse sculpture. Scutellum with five foveae at base, medially reticulate-rugose, tridentate apically, the medial tooth not in the form of a spine. Propodeum viewed posteriorly, angular, carinae of propodeum bowed, surface coarsely reticulate-rugose. Mesopleura with strigose sculpture in part, smooth on lower half. Segment 1 of gaster longer than broad, sulcate, segment 4 of gaster arcuate viewed dorsally, segment 5 the largest viewed laterally, segments 5-7 of gaster viewed laterally with a distinct apical fringe, hypopygium not protruding, ventral spine short. Fore and mid legs reddish black, hind coxa and femur reddish yellow, tarsi black, hind femur with erect spine between median area and apex, impunctate, hind tibia smooth and shining on outer margins, inner margins with weak longitudinal carinae. Wings infusate, densely ciliate on surface, margins bare,

radial cell closed, first cubital cell closed, second cubital (areolet) absent, cubitus almost reaching apex of wing. Colour: antenna, head, thorax and segment 1 of gaster (petiole) black, gaster reddish yellow, fore and mid legs reddish brown, hind coxae black, femur and tibia reddish yellow, tarsi blackish.

♂ unknown.

MATERIAL EXAMINED

Holotype ♀, Tanzania ('Tanganyika'): Mshughaa, 30 miles [48 km] east of Singida, xii.1935–i.1936 (E. Burt) (BMNH).

REMARKS. Distinguished from all other species in the genus by the absence of a long distinctive scutellar spine (see Fig. 125).

TESSMANNELLA Hedicke

Tessmannella Hedicke, 1912a : 303. Type-species: *Tessmannella spinosa* Hedicke, by original designation

DIAGNOSIS. ♀ antenna 13-segmented, subclavate; ♂ antenna 14-segmented. Face with reticulate to rugose sculpture and scattered pubescence. Pronotum coarsely rugose with median tooth or spine viewed laterally. Mesonotum with coarse variable sculpture, propodeum without pronounced side margins. Segment 1 of gaster (petiole) three times as long as broad, segments 2–4 short viewed laterally and dorsally, segment 5 the largest. Hind femur with a rounded lobe between medial area and apex, tooth on hind femur angled, hind tibia with a distinct lobe apically, opposite the tibial spines, scutellar foveae three in number.

DISTRIBUTION. Gabon; Zaire.

DISCUSSION. Only four species are at present known in this genus, including one described for the first time in this paper. Hedicke (1912a) separated *Tessmannella* from *Oberthuerella* by the presence of a median tooth on the pronotum and by the spine on the hind coxae being obliquely angled.

Biology unknown.

Key to species of *Tessmannella* Hedicke

- 1 Forewing infusate medially, with distinctive light-coloured area basally and medially in the cubital cell (Fig. 108). (♀ unknown) *transiens* Benoit (p. 118)
- Forewings completely infusate 2
- 2 Scutellar foveae either angular or rounded apically, not extending past the middle of lateral bars (Fig. 106), legs red except for black hind tibia 3
- Scutellar foveae extending past middle of lateral bars, triangular apically (Fig. 105); fore and mid legs dark chestnut-brown, hind legs entirely black. (♂ unknown) *nigra* Hedicke (p. 117)
- 3 Notaulices obscured by strong crenulations along whole length; scutellar foveae angled at apex; facial cheeks converging weakly towards clypeus (Fig. 104), face rounded medially, weakly pubescent, clypeus with transverse striations, mandibles with lobed teeth; hind tarsi red; lateral bars (outer apical spines of scutellum) parallel. (♂ unknown) . . . *spinosa* Hedicke (p. 117)
- Notaulices broad basally, not obscured by crenulations, weakly crenulate at base, mainly shiny, scutellar spine long and narrow at apex, foveae rounded at apex (Fig. 106), facial cheeks strongly converging towards clypeus, face flattened medially, pubescent, mandibles with incised teeth, hind tarsi black, lateral bars of scutellum acutely angled. (♂ unknown) *expansa* sp. n. (p. 116)

Tessmannella expansa sp. n.

(Figs 106, 107, 118)

DESCRIPTION. ♀. Antenna 13-segmented, subclavate. SN 3–13=AR 22 : 38 : 36 : 35 : 28 : 26 : 24 : 22 : 22 : 20 : 35. Face with irregular reticulate sculpture with long hairs issuing at base of each reticulation, mandibles with basal tooth blunt, incision deep, clypeus with weak coriaceous sculpture, eyes less than twice as far apart as height of eye viewed frontally, equal to length of malar space, cheeks weakly converging towards clypeus. Pronotum viewed laterally with median tooth or spine, frontal surface coriaceous, sides reticulate-rugose. Mesoscutum with broken widely spaced transverse sculpture, notaulices impressed on the surface sculpture and wide, median scutal furrow indicated by a depression, obscured by the transverse sculpture. Scutellum with three foveae at base, apex of scutellum with median spine and lateral

bars extended to form striate spines either side of median spine, surface of scutellum with irregular rugose sculpture. Mesopleurae with canaliculate sculpture on upper half and long hairs on a weakly reticulate polished surface on lower half. Propodeum sulcate at apex. Segment 1 of gaster sulcate, 3.5 times as long as broad, tergites 2-4 short, tergite 5 the largest, apex of tergite 5 and remaining visible tergites with long scattered hairs and dense punctures interspaced between the hairs, ovipositor sheath with dense hairs on the lower margins. Hind femur with a distinct tooth on inner margin which is directed backwards almost in same plane as femur, apex of femur emarginated (Fig. 129), hind tibia with reticulate-strigose sculpture and long hairs or spines, apex of hind tibia with a distinct lobe, tarsus 5-segmented with long hairs or spines on a reticulate surface. Radial cell of forewing completely closed, long and narrow, cubitus extending almost to edge of wing, wing surface ciliate, margin bare, whole wing infusate. Colour: antenna blackish brown, head reddish on face, blackish dorsally, thorax black, gaster chestnut-brown, all legs reddish brown except hind tibia and tarsi black.

♂ unknown.

MATERIAL EXAMINED

Holotype ♀, **Gabon**: Ogooue, Lambarene, 1910 (*R. Ellenberger*) (MNHN, Paris).

REMARKS. This species has close affinities with *spinosa* but is separated from it by a number of characters (see key).

Tessmannella nigra Hedicke

(Fig. 105)

Tessmannella nigra Hedicke, 1912a : 304. Holotype ♀, **ZAIRE** (MNHU, Berlin) [examined].

DESCRIPTION. ♀. Antenna 13-segmented, subclavate. Face with reticulate surface sculpture and fine white hairs issuing at base of reticulations, clypeus with very weak transverse striations, eyes further apart than height of eye, cheeks converging sharply towards clypeus viewed frontally. Pronotum viewed laterally with median tooth or spine, frontal surface polished, sides coarsely reticulate-rugose, mesoscutum appearing coarsely rugose with rugosity consisting of short transverse scales, notaulices and median scutal line impressed in the sculptured surface. Scutellum with three foveae at base, the outer two extending to apex of lateral bars which are finely striated and ending in a spine or tooth (Fig. 105), apex of scutellum with long median spine, surface of scutellum deeply rugose. Mesopleurae with canaliculate sculpture on upper half, lower half with long pubescence. Propodeum sulcate at apex. Segment 1 of gaster sulcate, three times as long as broad, tergites 2-4 short, tergite 5 the largest, apex of tergite 5 and remaining visible tergites with long scattered hairs and dense punctures interspaced between the hairs, ovipositor sheath with dense hairs on the lower margins. Hind femur with a distinct tooth on inner margin which is directed backwards almost in the same plane as femur, apex of femur rounded-emarginate (cf. Fig. 109), hind tibia with strong reticulate-caliculate sculpture and long hairs, apex of hind tibia with a distinct lobe and two spines, tarsus 5-segmented with fine coriaceous sculpture. Radial cell of forewing completely closed, long and narrow, cubitus extending past middle of wing, surface of wing ciliate, margin bare, whole wing infusate. Colour: antenna black, head, thorax and gaster black, front legs dark brownish black on coxae and femur, mid and hind legs completely black.

♂ unknown.

MATERIAL EXAMINED

Holotype ♀, **Zaire**: Uelleburg, vi-viii.1908 (*von Tessmann*) (MNHU, Berlin).

Zaire: 1 ♀ Kibombo, 2.xi.1910 (*Bequaert*) (MRAC, Tervuren).

Tessmannella spinosa Hedicke

(Figs 103, 104)

Tessmannella spinosa Hedicke, 1912a : 303. Holotype ♀, **ZAIRE** (MNHU, Berlin) [examined].

DESCRIPTION. ♀. Antenna 13-segmented, subclavate. Face with reticulate surface sculpture and fine white hairs issuing at base of reticulations, clypeus with transverse striations, eyes further apart than height of eye viewed frontally, less than length of malar space, cheeks strongly rounded or curved, converging strongly towards clypeus (Fig. 104). Pronotum viewed laterally with a median tooth or spine (Fig. 116), frontal surface polished, sides coarsely sculptured. Mesoscutum coarsely reticulate-rugose with notaulices

and median scutal line impressed (Fig. 103), scutellum with spine at apex and shorter ones either side (Fig. 103), scutellum with three foveae at base, not extending to apex at lateral bars, surface of scutellum strongly reticulate-rugose. Mesopleurae with canaliculate sculpture on upper half, lower half shiny with scattered pits. Propodeum sulcate at apex. Segment 1 of gaster sulcate, almost four times as long as wide, tergites 2-4 short, tergite 5 the largest, apex of tergite 5 and remaining visible segments with fine light scattered hairs and dense punctures, ovipositor sheath with dense hairs on lower margin. Legs red except for hind tibia blackish, hind femur with a distinct tooth on inner margin which is directed backward almost in same plane, apex of femur with rounded lobe (cf. Fig. 109), hind tibia with reticulate-rugose sculpture with long hairs, tarsus 5-segmented with long hairs, apex of hind tibia with a distinct lobe and two spines. Radial cell of forewing completely closed, long and narrow, cubitus extending to past middle of wing, surface of wing ciliate, margin bare, whole wing infusate. Colour: antenna brownish black, head and thorax black, gaster chestnut-brown, front and mid legs reddish brown, hind femur and tarsi reddish brown, tibia blackish brown.

♂ unknown.

MATERIAL EXAMINED

Holotype ♀, Zaire: Uelleberg, vi-viii.1908 (von Tessman) (MNHU, Berlin).

Tessmannella transiens Benoit

(Figs 108, 116, 118)

Tessmannella transiens Benoit, 1955 : 283. Holotype ♂, ZAIRE (MRAC, Tervuren) [examined].

DESCRIPTION. ♂. Antenna 14-segmented, subclavate. Face with coarse reticulate sculpture and scattered pubescence, frontal line distinct, branching before reaching frontal area, occipital carinae pronounced, eyes further apart than height of eye, cheeks converging weakly. Pronotum viewed laterally with a median tooth or spine (Fig. 116), dorsal surface with coarse reticulate-rugose sculpture and foveolae. Mesonotum scaly-reticulate, notaulices impressed in surface sculpture, indistinct. Scutellum with three apical spines, scutellar foveae extending partly along lateral bars. Mesopleurae with canaliculate sculpture on upper half, lower half smooth with weak pits apically, propodeum sulcate. Segment 1 of gaster sulcate, four times as long as broad, tergites 2-4 short, viewed dorsally evenly curved (Fig. 118), tergite 5 the largest, viewed laterally densely punctate, apex of tergites 5 and remaining visible segments with long distinct scattered hairs. Legs black, hind femur with a distinct tooth on inner margin directed weakly towards apex, apex of femur with a distal lobe, hind tibia scaly-reticulate with long scattered hairs, apex of hind tibia with two spines and a distinct lobe, tarsus 5-segmented, surface sculpture fine reticulate. Radial cell of forewing completely closed, five times as long as broad, cubitus faint, extending almost to apex of wing, wing surface ciliate, margin bare, wing infusate medially to apex except for the medial area of the cubital cell.

Colour: completely black except for lower margins of basal segments of gaster which are chestnut-brown.

♀ unknown.

MATERIAL EXAMINED

Holotype ♂, Zaire: Ditri Tanganikam Albertville, 1-20.i.1919 (R. Mayne) (MRAC, Tervuren).

XENOCYNIPS Kieffer

Xenocynips Kieffer, 1910 : 340. Type-species: *Xenocynips subsquamata* Kieffer, by original designation and monotypy.

DIAGNOSIS. ♀. Antenna 13-segmented, claviform. Head and thorax strongly rugose. Scutellar foveae obscured by longitudinal carinae, scutellum reticulate-rugose, apex triangular. Pronotum viewed laterally with erect tooth or spine on hind margin anterior of mesoscutum (Fig. 32). Hind femur without a lobe distally, with an erect spine medially. Gaster with tergites 2-4 fused without trace of a suture (Fig. 32).

DISTRIBUTION. Zaire.

DISCUSSION. Only one species, based on a single specimen, has so far been placed in this genus. It differs from *Tessmannella* primarily by segments 2-4 of the gaster being fused and the spine on the hind coxae being erect. Weld (1952) suggested that at first appearance the size and shape of the gastral tergites could confuse it with the *Figitinae*.

Xenocynips subsquamata Kieffer

(Figs 32, 110, 111, 112, 113)

Xenocynips subsquamata Kieffer, 1910b : 340. Holotype ♀, CAMEROUN (IP, Eberswalde) [examined].

DESCRIPTION. ♀. Antenna 13-segmented, claviform, rhinaria on segments 4–13, segment 4 three times length of 3 (Fig. 112), basal segment brown, 2–8 yellowish, remainder brownish yellow. Head, pronotum and mesoscutum dorsally strongly rugose. Scutellar foveal depression obscured by longitudinal carinae, surface of scutellum reticulate-rugose, apex triangular, ending in conical protrusion; propodeum with parallel carinae. Pronotum viewed laterally with erect tooth on hind margin at anterior end of mesoscutum. Mesopleura polished with broken striate sculpture, fore and mid coxae yellowish brown, hind coxae blackish, elongate and swollen with scattered pubescence, hind femur with erect spine (Fig. 111), without a distal lobe. Segment 1 of gaster measured at extreme points less than three times as long as broad, crenulate, segment 2 of gaster small, fused with segments 3–4, segment 5 the largest with short regular hairs on apical half. Colour: antenna yellow basally, becoming darker towards apex, head and thorax black, gaster chestnut-red basally, brownish black on apical half, fore and mid legs yellowish, hind legs reddish brown on coxae and femur, tibia and tarsi dark reddish brown. Forewings with scattered short pubescence, wing margin without an apical hair fringe, radial cell completely closed, long and narrow, 4.5 times as long as its widest point, with a brownish patch extending throughout cell and well below, vein *2rm* short, *M* (cubitus) weak, extending almost to wing margin (Fig. 113).

♂ unknown.

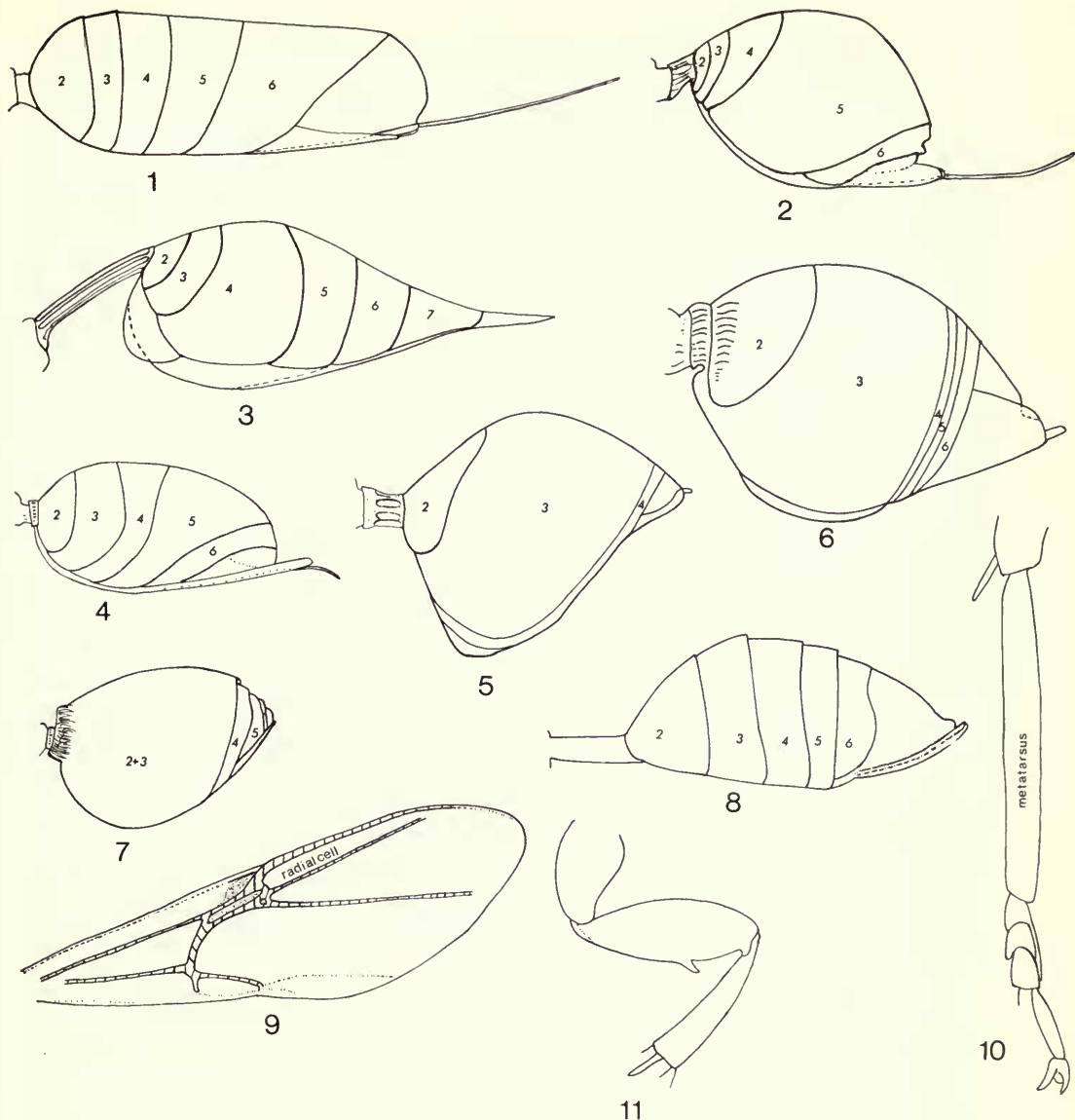
MATERIAL EXAMINED

Holotype ♀, Cameroun (Conradt) (IP, Eberswalde).

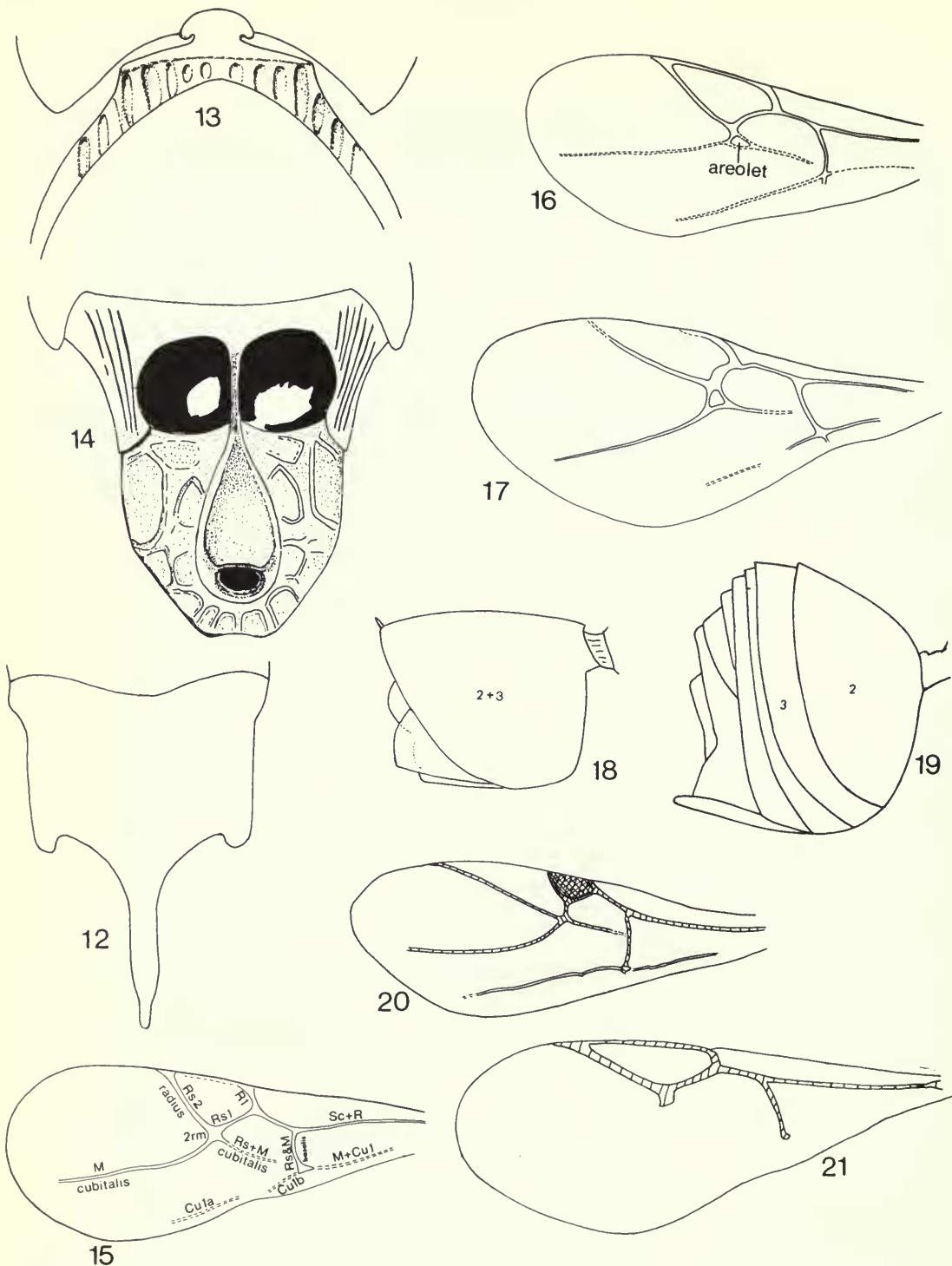
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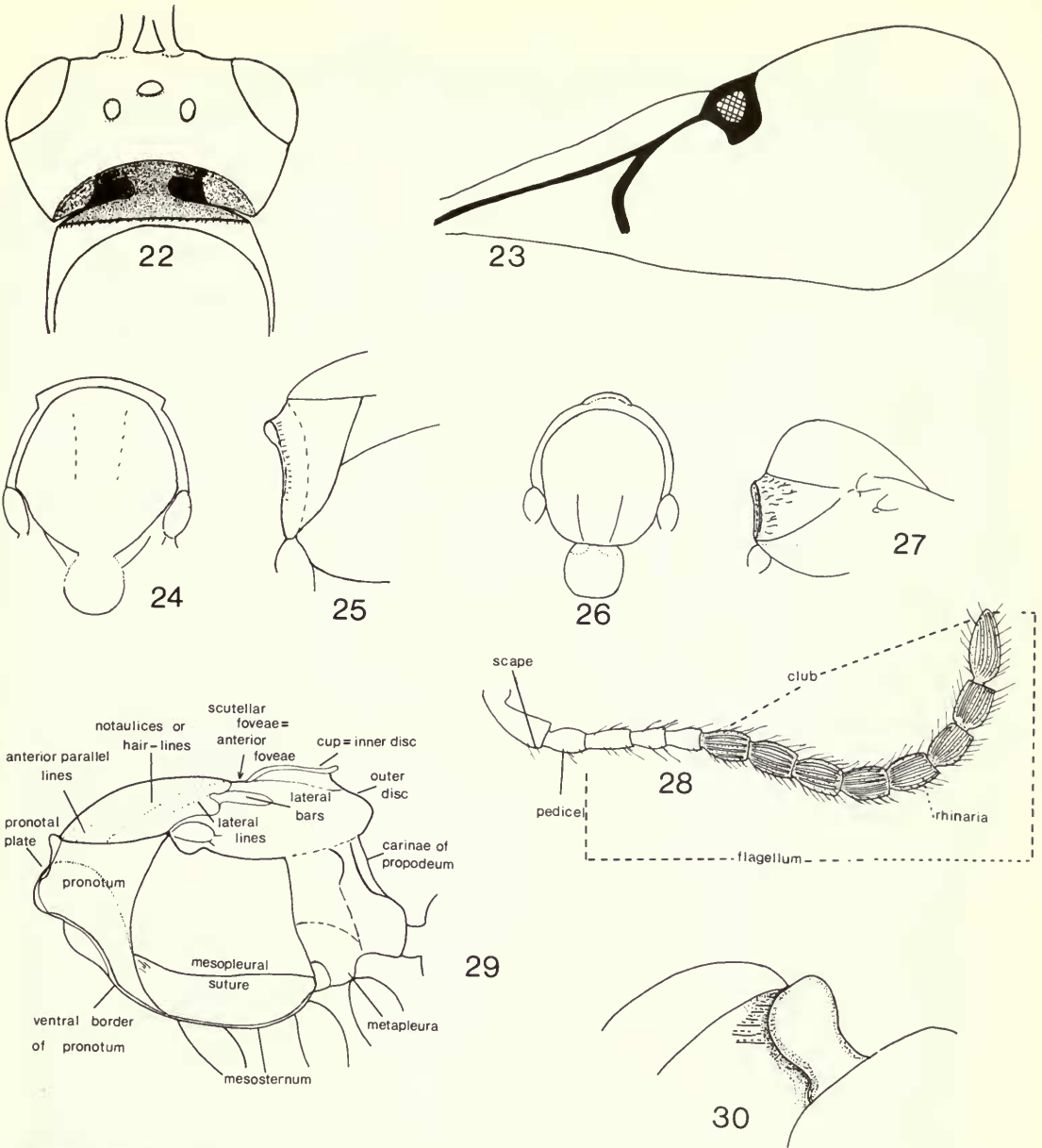
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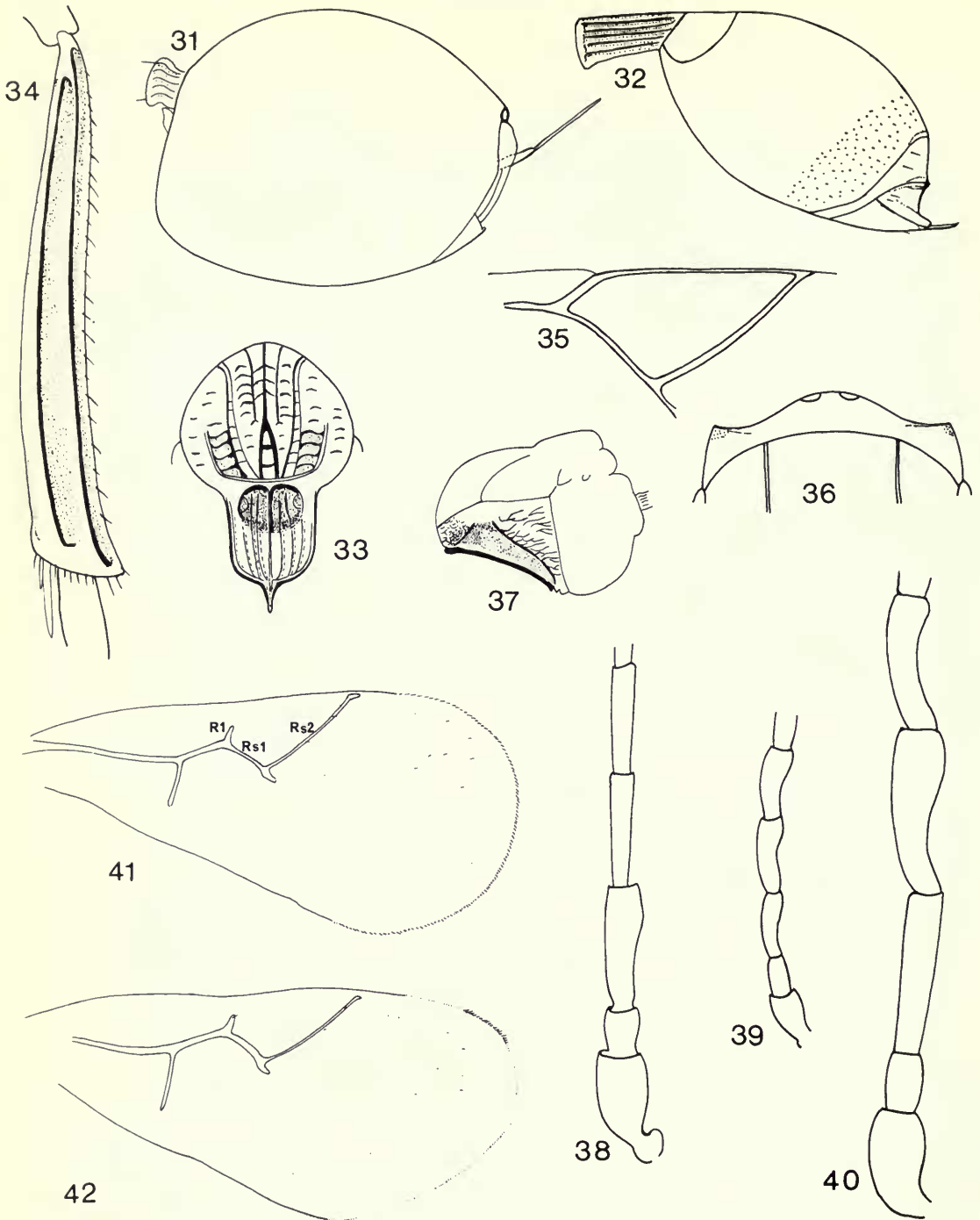
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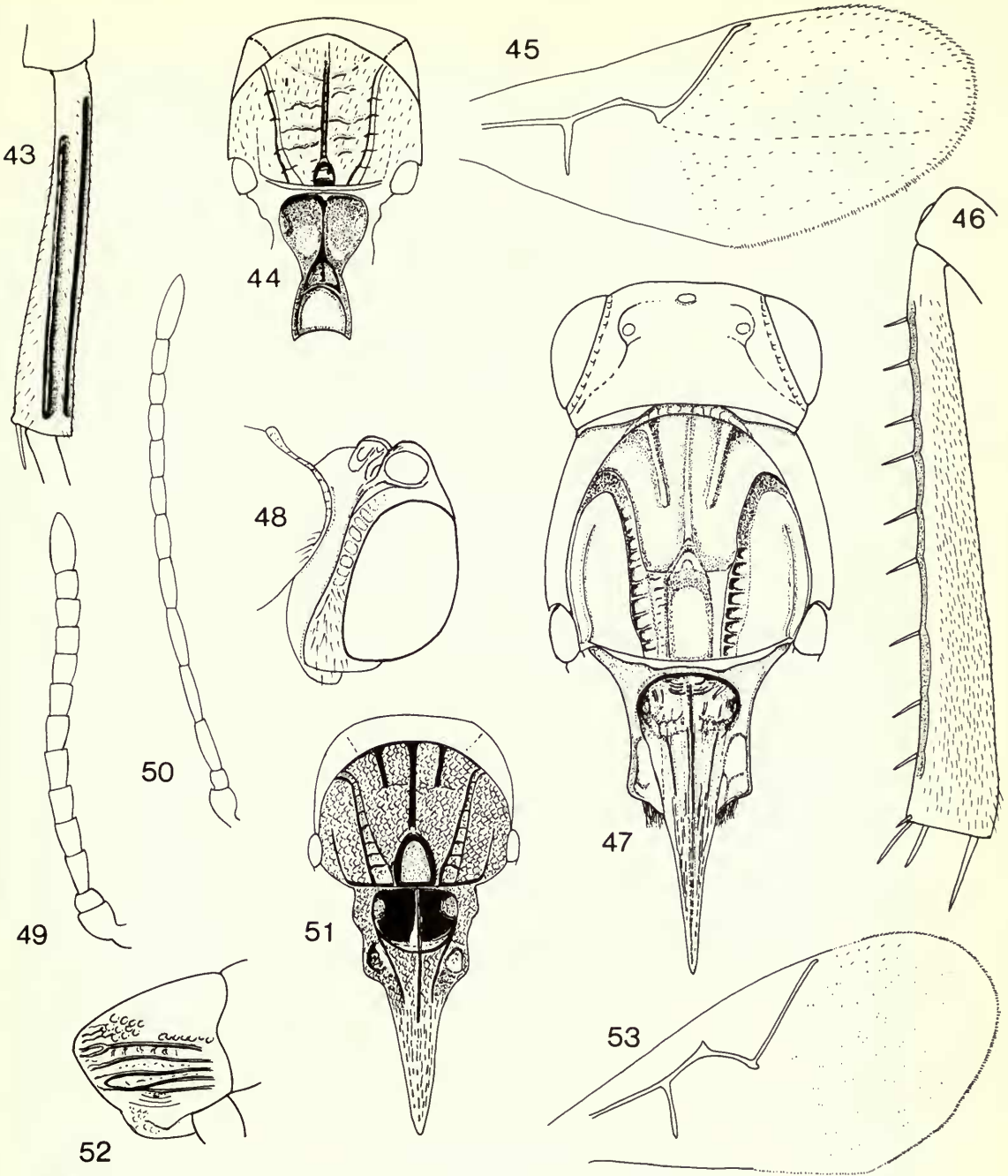
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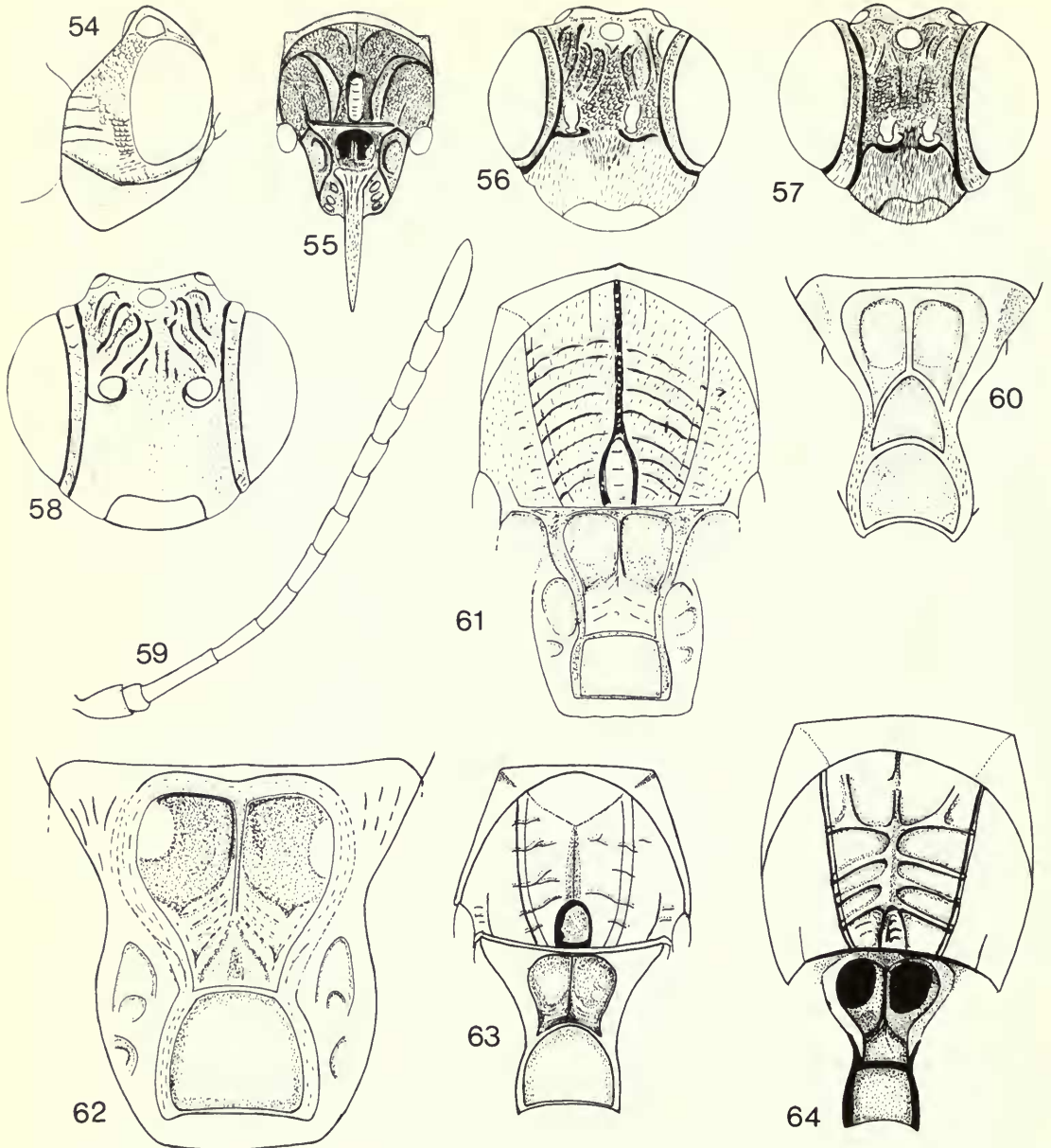
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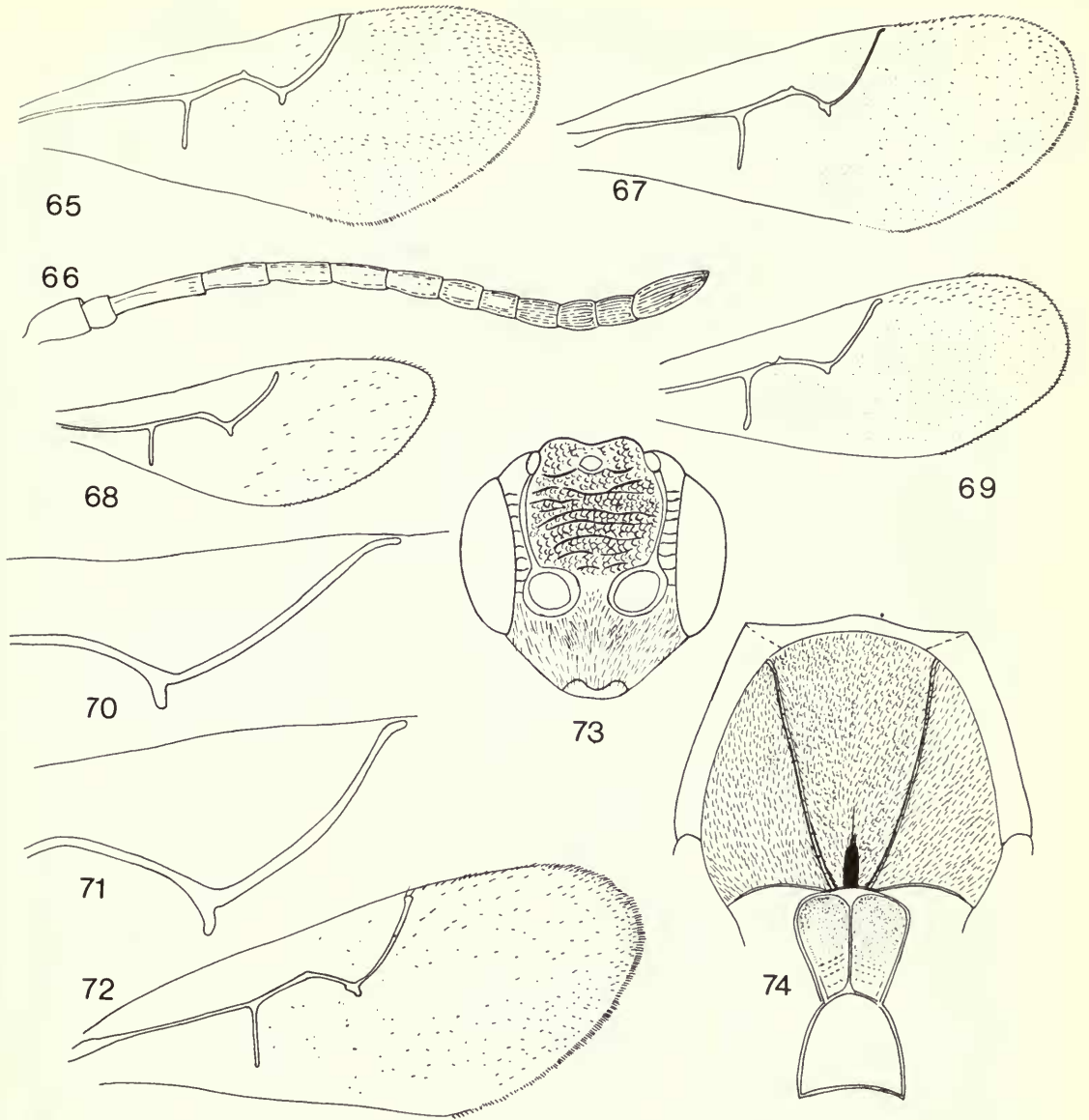
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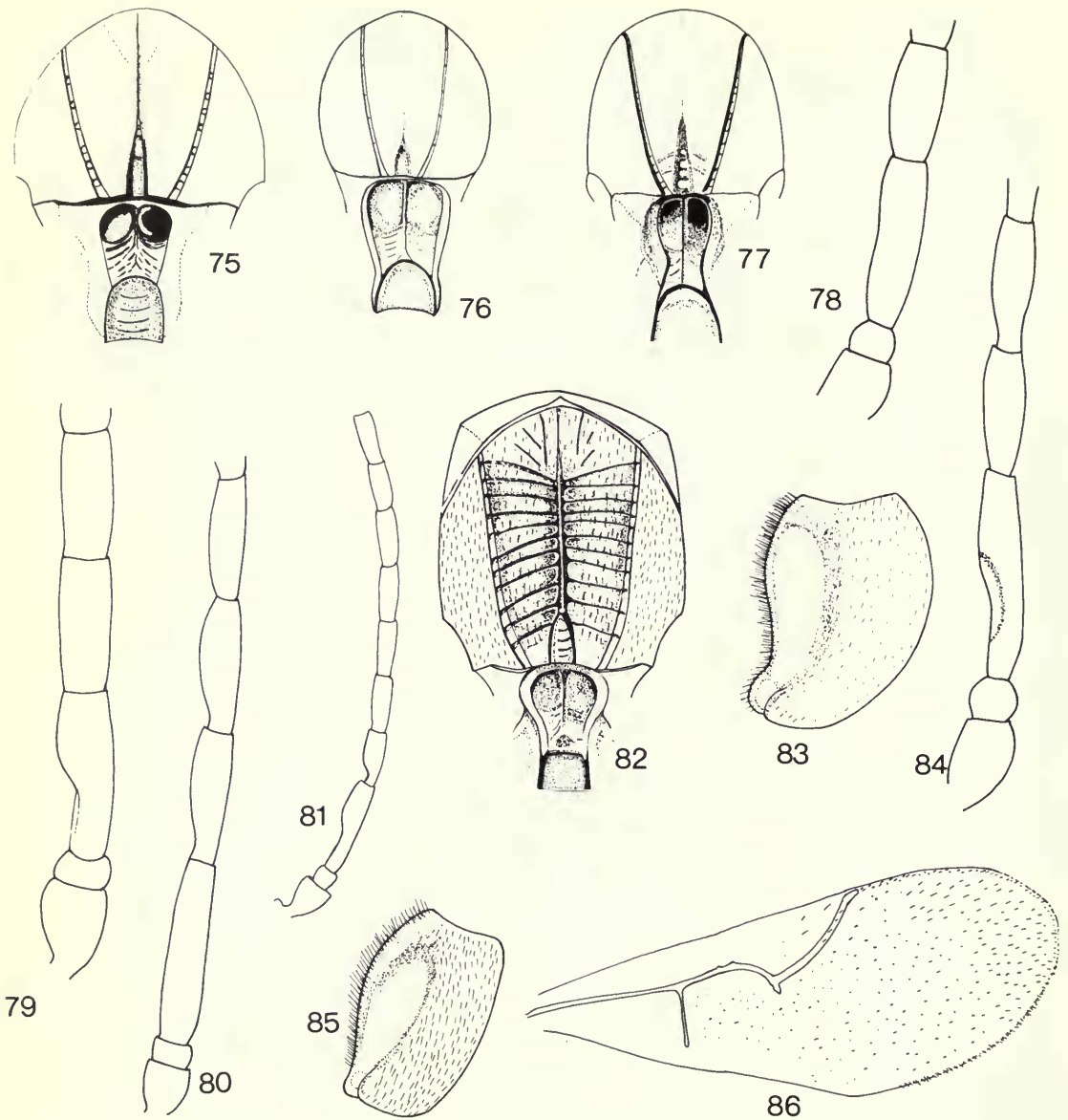
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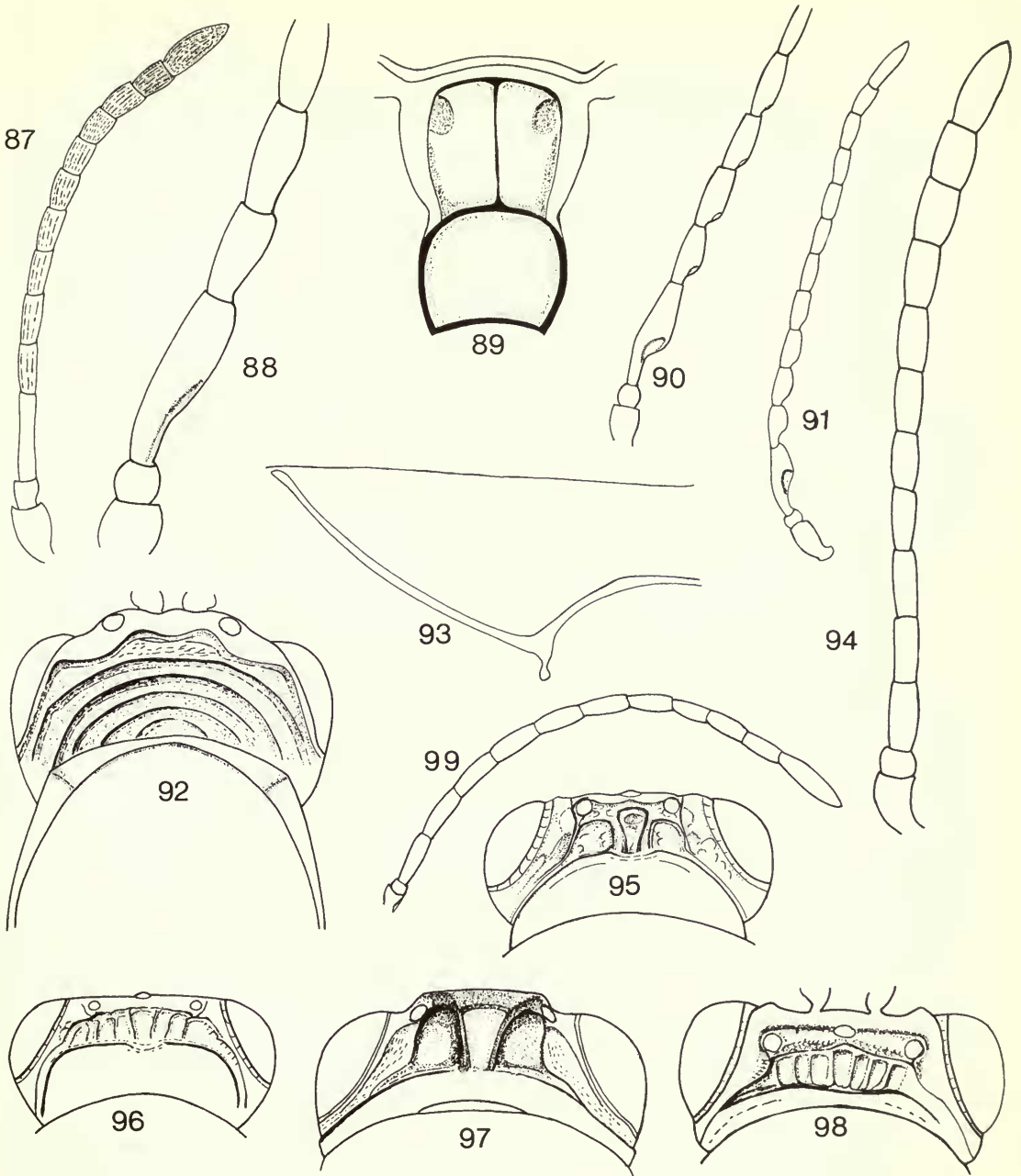
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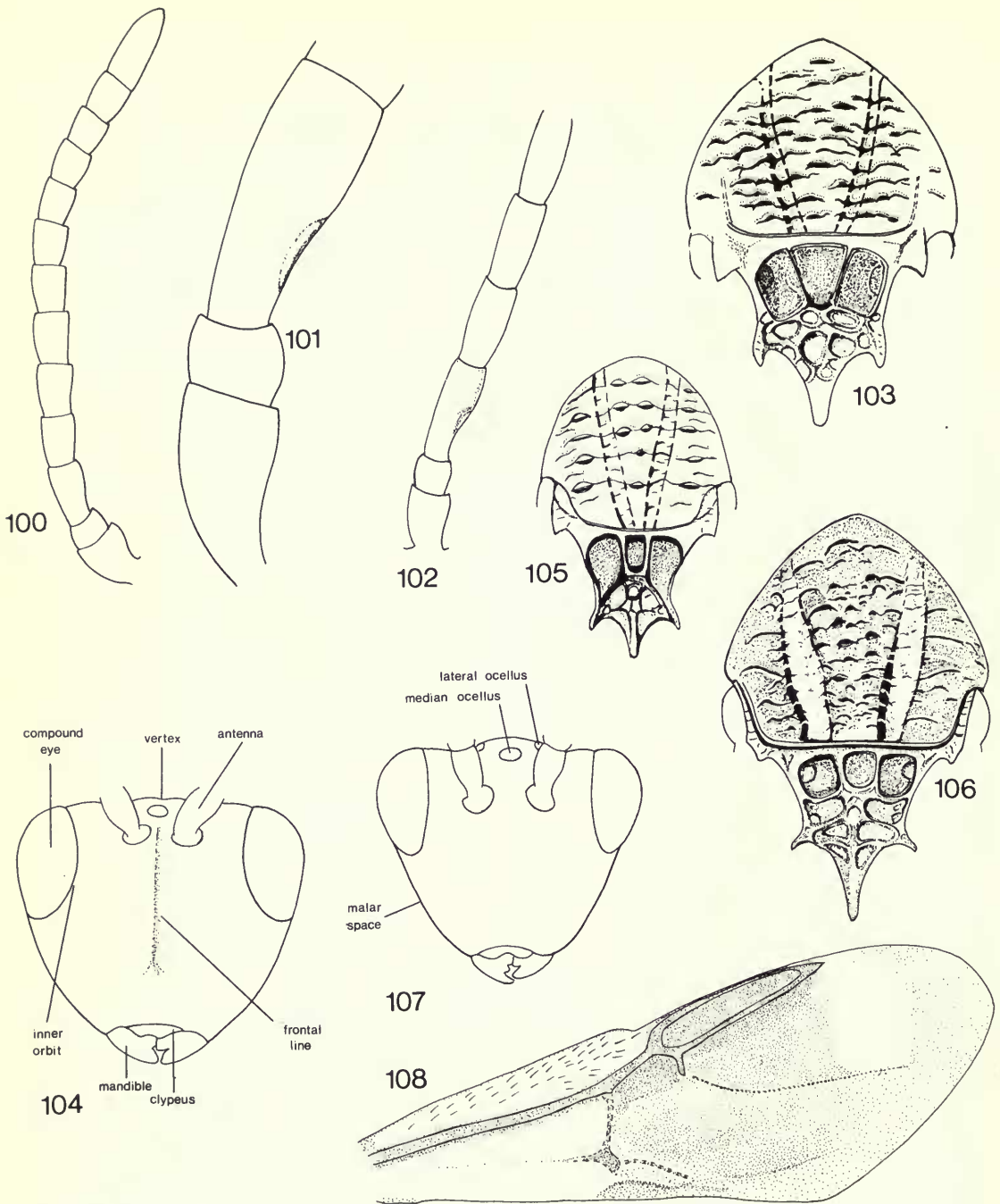
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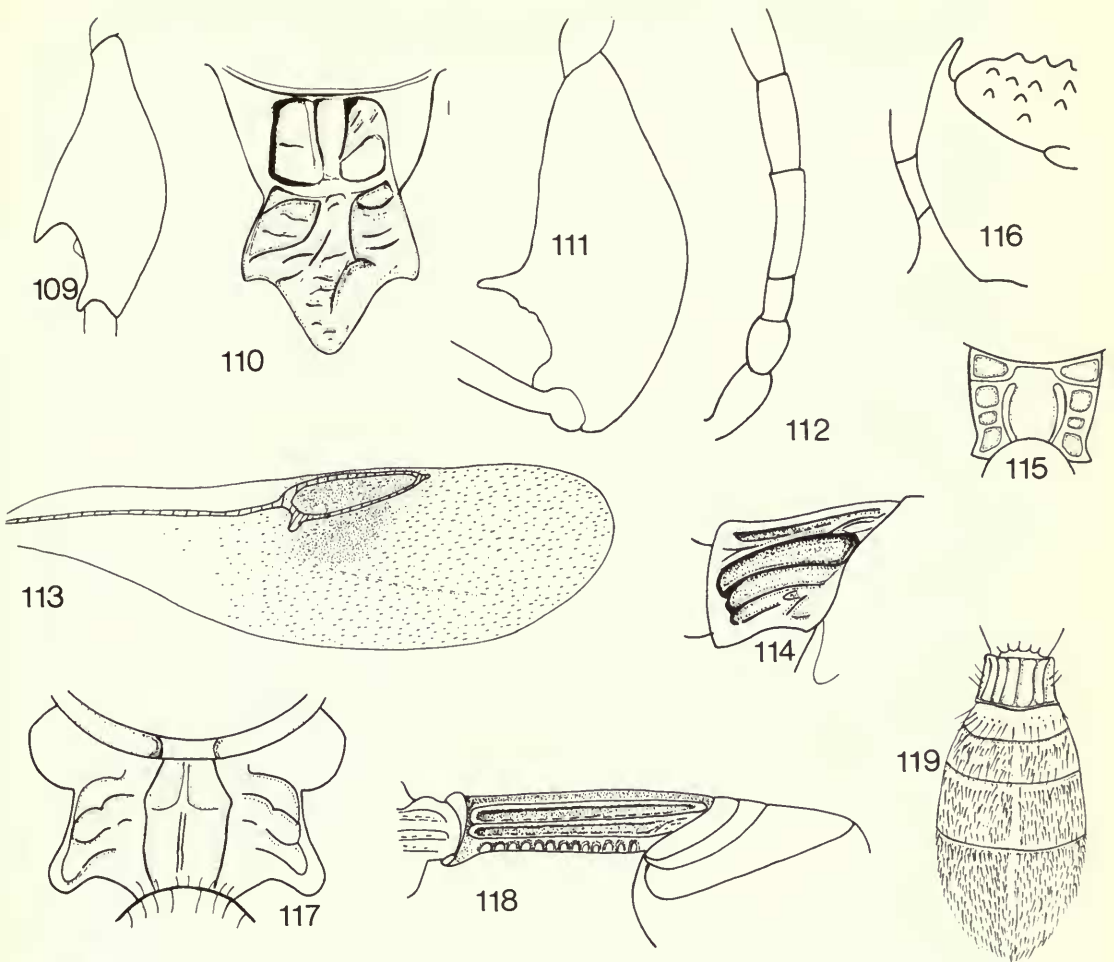
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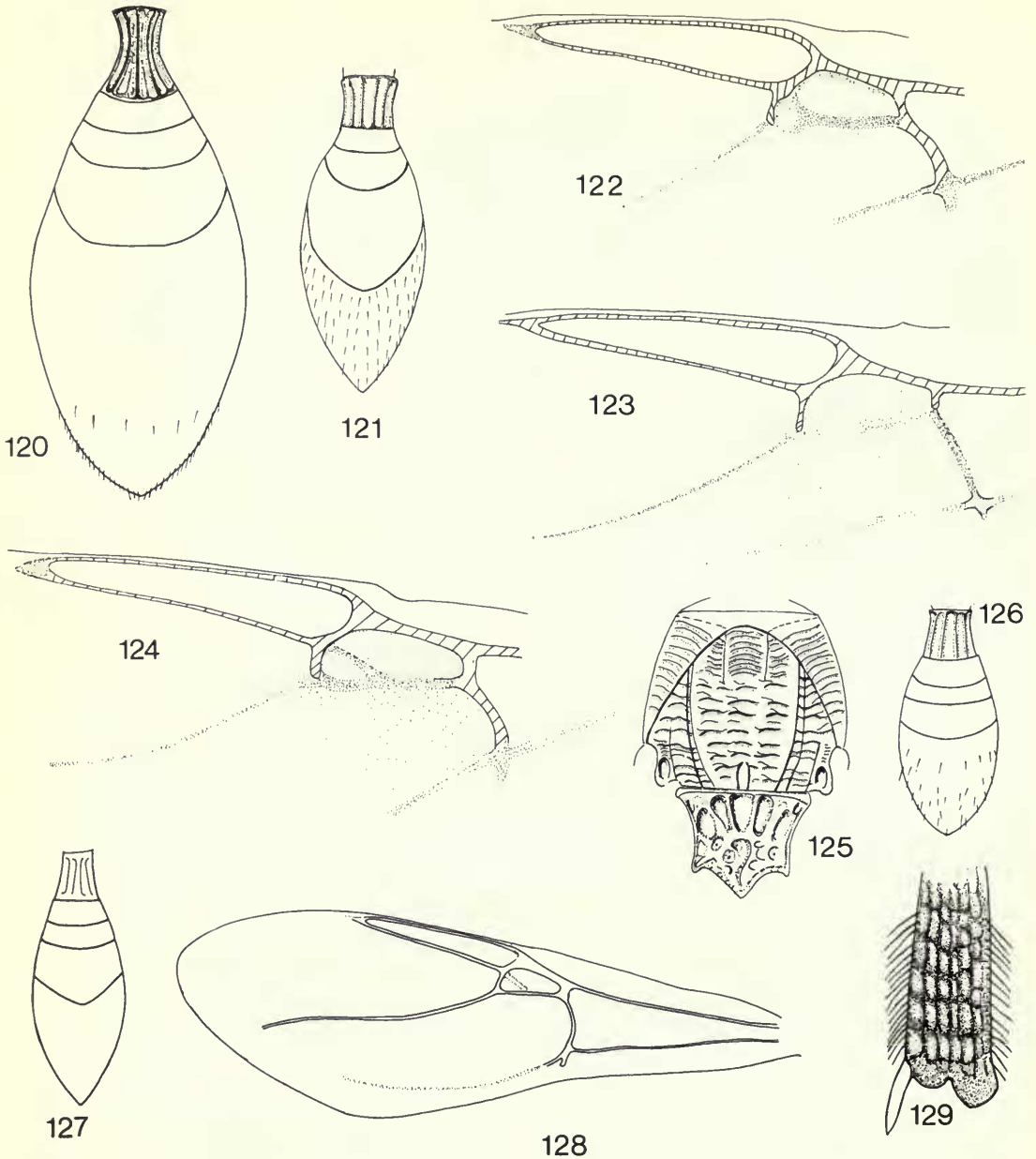
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